



TriMet Defined Benefit Retirement Plan for Management and Staff Employees

Actuarial Valuation Report as of June 30, 2023

Produced by Cheiron

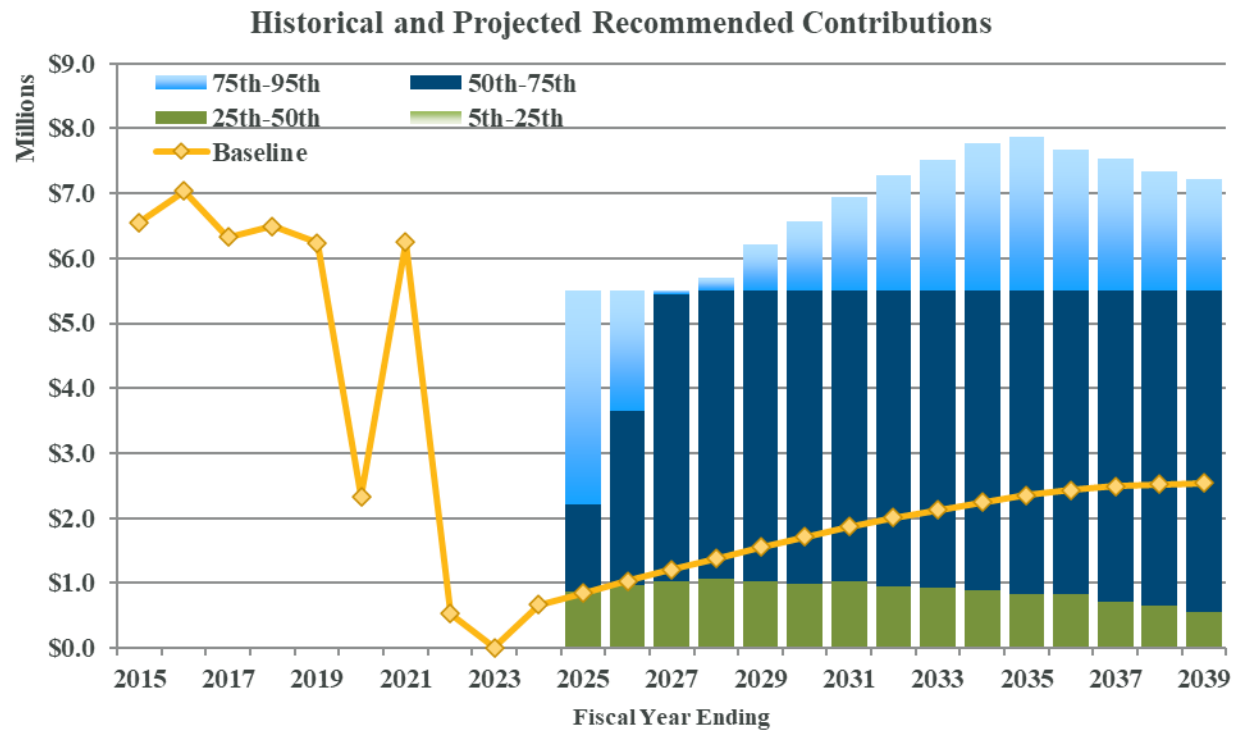
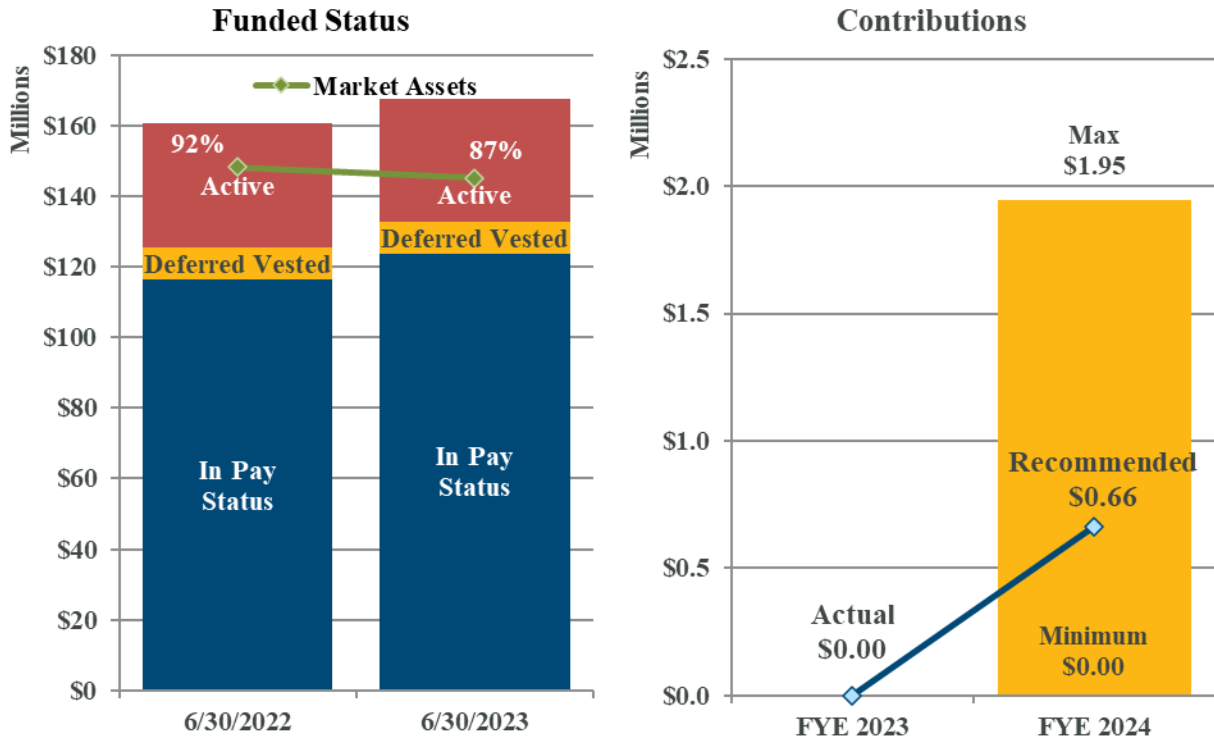
September 2023

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**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023**

SECTION I – BOARD SUMMARY



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Funded Status

The chart in the upper left corner of the dashboard shows the assets, Actuarial Liability, and funded status for the current and prior valuations. These measures are for the purpose of assessing funding progress in a budgeting context and are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan’s benefit obligations. For many pension plans, the liability measures for financial reporting under GASB 67 and 68 are different, but for TriMet, they are the same.

The bars represent the Actuarial Liability (or Total Pension Liability), which is used as a funding target, and are separated between the liability for members currently receiving benefits (dark blue), inactive members entitled to future benefits (gold), and active members (red). About 74% of the liability is for members currently receiving benefits. The green line shows the Market Value of Assets (or Fiduciary Net Position). The percentage on the top of the bar represents the funded status, which decreased from 92% to 87%.

Table I-1 below summarizes the Actuarial Liability, assets, and funded status as of June 30, 2022 and 2023.

Table I-1

Summary of Funded Status			
	June 30, 2023	June 30, 2022	% Change
Actuarial Liability			
Actives	\$ 34,939,144	\$ 34,886,987	0.1%
Deferred Vested	8,968,900	9,372,890	-4.3%
In Pay Status	<u>123,732,818</u>	<u>116,298,345</u>	<u>6.4%</u>
Total	\$ 167,640,862	\$ 160,558,222	4.4%
Market Value of Assets (MVA)	\$ 145,162,348	\$ 148,261,434	-2.1%
Unfunded Actuarial Liability - MVA Basis	\$ 22,478,514	\$ 12,296,788	82.8%
Funding Ratio	86.6%	92.3%	-5.7%

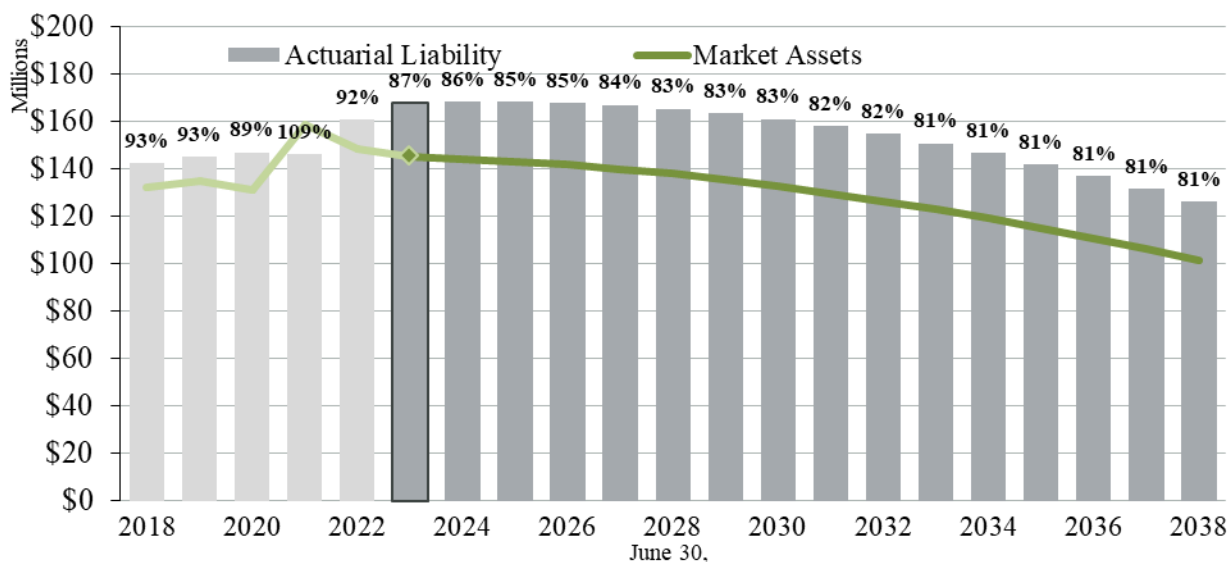
The Actuarial Liability represents the target amount of assets the plan should have in the trust as of the valuation date based on the actuarial cost method. In aggregate, the Actuarial Liability increased 4.4% primarily reflecting larger-than-expected salary and COLA increases. The Market Value of Assets decreased 2.1% due to benefit payments and expenses offset by investment returns. As a result, the Unfunded Actuarial Liability (UAL) increased from approximately \$12.3 million to \$22.5 million, and the funding ratio decreased from 92.3% to 86.6%.

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The chart below shows the historical and projected trends for assets versus the Actuarial Liability. It also shows the progress of the funding ratios. The historical Actuarial Liability is shown in light gray while the projected Actuarial Liability is shown in a darker gray. The Actuarial Liability is projected to reach its peak in 2025.

Historical and Projected Assets and Actuarial Liability



More detail on the assets can be found in section IV of this report, and more detail on the measures of liability can be found in section V of this report.

Contributions and Pension Expense

The chart in the upper right corner of the dashboard on page 1 shows the range (gold bars) from the Minimum to Maximum and the Recommended Actuarially Determined Contribution (ADC) assuming it is paid monthly throughout the year. Because the plan was greater than 90% funded as of June 30, 2022, the Minimum, Maximum, and Recommended contributions were all equal to \$0 for FYE 2023. For FYE 2024, the funded ratio dropped below 90%, but remained above 80%. Consequently, under the funding policy, the minimum contribution is still \$0, but the maximum contribution is \$1.95 million – the amount needed to keep the same funded ratio if all assumptions are met. The Recommended contribution of \$0.66 million is a blend between the Minimum and Maximum contributions based on being 86.6% funded. At 80% funded, the Recommended contribution would equal the Maximum, and at 90% funded, the Recommended contribution would equal \$0.

The Tread Water Cost is equal to the normal cost plus interest on the UAL or surplus. The normal cost represents the expected cost of the benefits attributed to the next year of service, and the interest on the UAL represents the amount that would need to be contributed to keep the UAL or surplus at the same dollar amount if all assumptions are met. To the extent actual

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contributions exceed the Tread Water Cost, the UAL is expected to decline, or the surplus is expected to increase.

While the Maximum contribution for FYE 2024 exceeds the Tread Water Cost, the Minimum and Recommended contributions do not. Assuming Recommended contributions are contributed each year, contributions are not expected to exceed the Tread Water Cost until FYE 2032. We note that this delay is by design in the funding policy to limit the probability of a surplus developing. When the plan is well-funded, the Recommended contribution will be less than the Tread Water Cost, but if the funding ratio drops, higher contributions that exceed the Tread Water Cost would be Recommended. The objective in the funding policy of avoiding surplus also means that the UAL is not expected to be paid off until the last benefit is paid.

Under GASB 68, the annual pension expense or income equals the Tread Water Cost plus the cost of any benefit changes and the recognized portion of prior experience gains and losses and assumption changes. Details of this calculation are shown in Section VII of the report.

Table I-2 compares the Recommended ADC to actual contribution amounts and pension expense for the fiscal years ending in 2022 and 2023. The pension expense decreased from \$14.2 million in FYE 2022 to \$8.2 million in FYE 2023. The ADC and actual contributions decreased to \$0.

Table I-2

Annual Contributions and Pension Expense					
	FYE 2023		FYE 2022		% Change
Pension Expense (\$ Amount)	\$	8,170,113	\$	14,227,403	-42.6%
Actuarially Determined Contribution ¹	\$	0	\$	197,340	-100.0%
Actual Contribution		<u>0</u>		<u>522,208</u>	-100.0%
Contribution Deficiency/(Excess)	\$	0	\$	(324,868)	

¹ Amounts assume monthly contributions made throughout the year

As shown by the chart at the bottom of the dashboard (page 1), actual contributions have exceeded \$6 million for six of the last 10 years, which has been significantly more than the ADC, but have been much lower the last two years. For FYE 2024 and in the future, the projections in the chart assume that the Recommended ADC is contributed. The baseline represents the projected Recommended ADC if all assumptions are met, and it shows the Recommended ADC gradually increasing to about \$2.5 million over the projection period. The range of the bars represents the range of the Recommended ADC based on the potential range of actual investment returns. For these projections, we used an expected return of 6.0% and a

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standard deviation of 8.5%¹. The dark blue bars show potential contributions in moderately poor investment scenarios and the top of the dark blue bar for FYE 2027 through 2039 is the assumed TriMet budget amount of \$5.5 million, which becomes the Recommended ADC as soon as the plan is less than 80% funded unless the Minimum is larger, or the Maximum is smaller. The light blue bars show potential contributions under scenarios with very poor investment returns.

Section II of this report provides more detailed information on the risks to contribution amounts and Section VI of this report provides additional detail on the development of the range of contribution amounts.

¹ Standard deviation provided in Meketa’s April 17, 2023 Board of Trustees meeting materials.

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Changes

During FYE 2023, the UAL (or Net Pension Liability in GASB 67/68) increased by \$10.2 million. Table I-3 below shows the breakdown of the changes in the UAL in the last year by source.

Table I-3

Changes in UAL or NPL	
	Amount
UAL/NPL, June 30, 2023	\$ 22,478,514
UAL/NPL, June 30, 2022	12,296,788
Change in UAL/NPL	\$ 10,181,726
<u>Sources of Changes</u>	
Plan Changes	\$ 0
Assumption Changes	0
Contributions vs. Tread Water Cost	1,436,079
Investment (gain) or loss	2,649,286
Liability (gain) or loss	
COLA	\$ 3,539,640
Salaries	2,445,920
Retirement	(169,338)
Termination	31,091
Mortality	180,084
Other	68,964
Total Liability (gain) or loss	\$ 6,096,361
Total Changes	\$ 10,181,726

The most significant source of the increase in the UAL is the higher-than-expected COLAs (\$3.5 million) due to the high level of inflation we experienced. Inflation may also be the primary reason for the higher salary increases than expected (\$2.4 million). Investment returns also fell short of assumed returns by about \$2.6 million, and the lack of contributions caused an increase in UAL of \$1.4 million. Other demographic experience increased the UAL about \$0.1 million.

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Table I-4 below provides a summary of the results of this valuation compared to the prior valuation.

Table I-4

Summary of Valuation Results			
	June 30, 2023	June 30, 2022	% Change
Membership			
Actives	51	57	-10.5%
Deferred	55	62	-11.3%
In Pay Status	<u>352</u>	<u>347</u>	1.4%
Total	458	466	-1.7%
Expected Active Member Payroll	\$ 5,636,366	\$ 5,765,520	-2.2%
Actuarial Liability or Total Pension Liability	\$ 167,640,862	\$ 160,558,222	4.4%
Market Value of Assets or Fiduciary Net Position	<u>145,162,348</u>	<u>148,261,434</u>	-2.1%
Unfunded Actuarial Liability or Net Pension Liability	\$ 22,478,514	\$ 12,296,788	82.8%
Deferred Outflows of Resources	(1,491,679)	0	
Deferred Inflows of Resources	<u>0</u>	<u>519,934</u>	-100.0%
Net Impact on Statement of Net Position	\$ 20,986,835	\$ 12,816,722	63.7%
Funding Ratio	86.6%	92.3%	-5.7%
	FYE 2024	FYE 2023	
Minimum Contribution	\$ 0	\$ 0	
Maximum Contribution	\$ 1,947,396	\$ 0	
Recommended Contribution	\$ 663,816	\$ 0	

Contribution amounts assume monthly contributions made throughout the year

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may be significantly different. This section of the report is intended to identify the primary risks to the plan, provide some background information about those risks, and provide an assessment of those risks.

Identification of Risks

The fundamental risk to a pension plan is that the contributions needed to pay the benefits become unaffordable. Given the size of the Plan compared to TriMet as a whole, we believe it is unlikely that the Plan by itself would become unaffordable. Nevertheless, the contributions needed to support the Plan may differ significantly from expectations. While there are several factors that could lead to contribution amounts deviating from expectations, we believe the primary sources are:

- Investment risk, and
- Inflation risk.

Other risks that we have not identified may also turn out to be important.

Investment Risk is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the Unfunded Actuarial Liability necessitating higher contributions in the future unless there are other gains that offset these investment losses. In contrast, higher investment returns than anticipated may create a potentially significant surplus that could be difficult to use until all benefits have been paid. Expected future investment returns and their potential volatility are determined by the Plan's asset allocation.

Inflation risk is the potential for actual inflation to be different than expected. Retirement benefits under the plan are increased each year by 90% of inflation (CPI-W) up to a maximum of 7.00%. Higher inflation than expected will result in the payment of greater benefits, and lower inflation than expected will result in the payment of lower benefits.

The table on the next page shows a 10-year history of changes in the UAL by source.

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Table II-1

FYE	UAL Change by Source						Total UAL Change
	Plan Changes	Assumption Changes	Contributions vs. Tread Water	Investment Experience	Liability Experience		
2014	0	(531)	(2,709)	(7,720)	(3,002)	(13,963)	
2015	0	(2,178)	(5,022)	5,018	3,592	1,411	
2016	0	474	(4,668)	5,819	(1,293)	334	
2017	0	0	(4,051)	(724)	1,441	(3,333)	
2018	0	0	(4,674)	(293)	(29)	(4,996)	
2019	0	0	(4,932)	4,511	397	(24)	
2020	0	(959)	(928)	6,608	928	5,649	
2021	(32)	0	(4,711)	(21,994)	(1,697)	(28,434)	
2022	0	7,170	(625)	11,414	7,111	25,070	
2023	0	0	1,436	2,649	6,096	10,182	
Total	\$ (32)	\$ 3,976	\$ (30,884)	\$ 5,290	\$ 13,545	\$ (8,105)	

Amounts in Thousands

Over the last 10 years, the UAL has been reduced by approximately \$8.1 million. Contributions reduced the UAL by \$30.9 million, while assumption changes, investment experience, and liability experience increased the UAL by \$4.0 million, \$5.3 million, and \$13.5 million, respectively. The losses for liability experience have occurred almost entirely in the last two years due to inflation’s impact on the COLA and salary increases.

Plan Maturity Measures

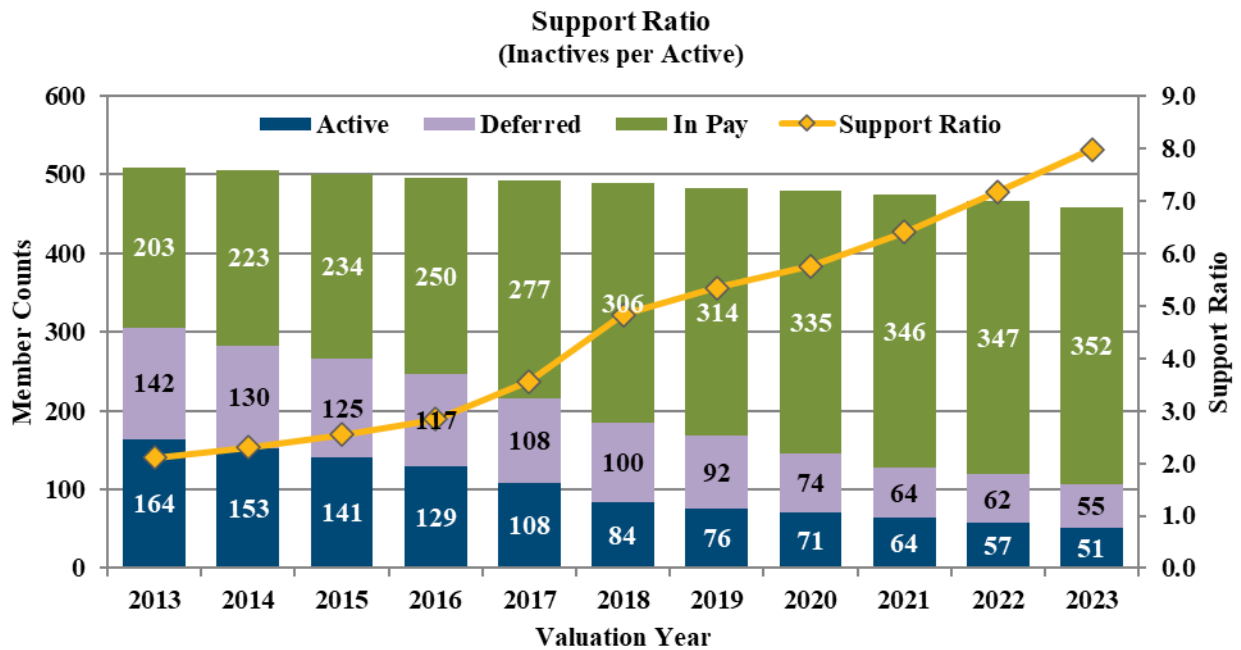
Plan maturity can be measured in a variety of ways, but there is one very important dynamic – the larger the plan is compared to the contribution or revenue base that supports it; the more sensitive the plan will be to risk. Given that the Plan has been closed to new entrants since 2003, maturity measures isolated on the Plan show significant increases in maturity.

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Support Ratio (Inactives per Active)

One simple measure of plan maturity is the ratio of the number of inactive members (those receiving benefits or entitled to a deferred benefit) to the number of active members. For a closed plan, the Support Ratio is expected to increase significantly unless active employees who are not covered by the Plan are included. The chart below shows the growth in the Support Ratio for the closed Plan for the current and prior 10 years.

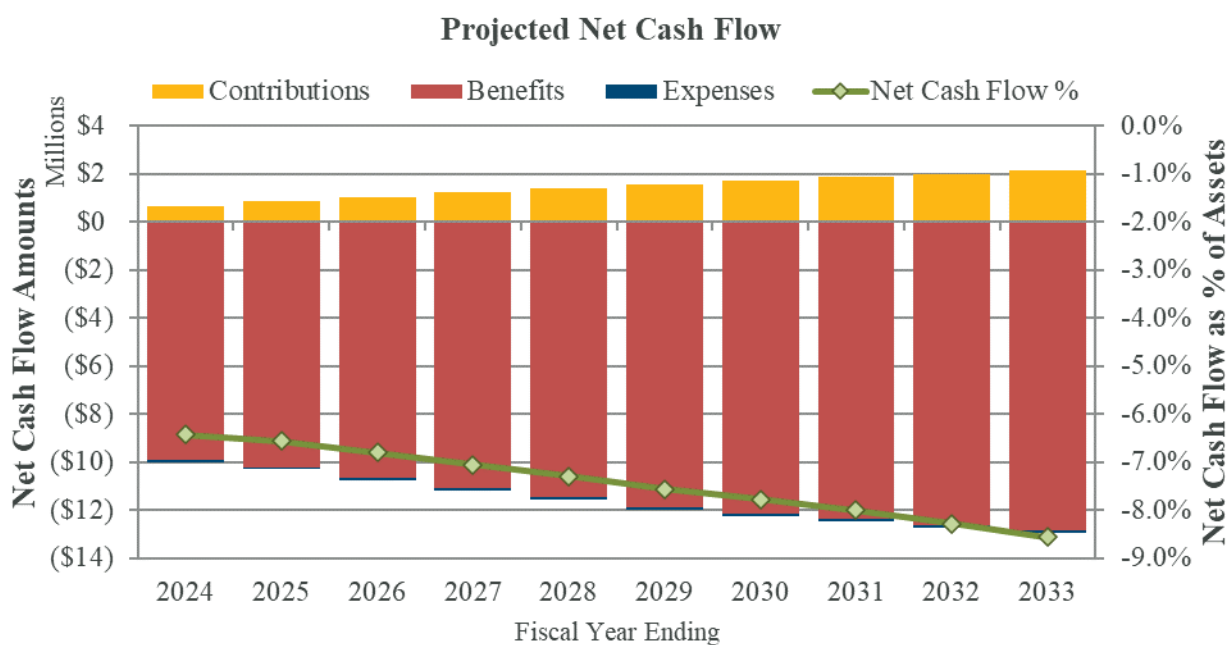


SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Net Cash Flow

The net cash flow of the plan as a percentage of the beginning of year assets indicates the sensitivity of the plan to short-term investment returns. Net cash flow is equal to contributions less benefit payments and administrative expenses. Mature plans can have large amounts of benefit payments compared to contributions, particularly if they are well funded.

The chart below shows the projected net cash flow for the next 10 fiscal years. The bars represent the dollar amounts of the different components of the projected net cash flow, and the line represents the net cash flow as a percentage of the assets as of the beginning of the fiscal year.



While TriMet was contributing larger amounts to improve the funded status of the Plan, the net cash flow was positive. Future contributions are projected to be much smaller even as benefit payments continue to grow. As a result, the net cash flow is expected to become increasingly negative. To the extent benefit payments exceed the cash income generated by the investment portfolio, investments will need to be liquidated. Benefit payments are expected to grow, further increasing the need for liquidity. The negative cash flow can be exacerbated in any given year by lump sum payments, and any volatility in contributions can cause significant variation in net cash flow from year to year. Managing the varying liquidity requirements may become challenging.

The other potential issue related to large negative net cash flow is the sensitivity to short-term investment returns. Investment losses in the short term are compounded by the net withdrawal from the plan leaving a smaller asset base to try to recover from the investment losses. On the other hand, large investment gains in the short term also tend to have a longer beneficial effect as any future losses are relative to a smaller liability base due to the negative cash flow.

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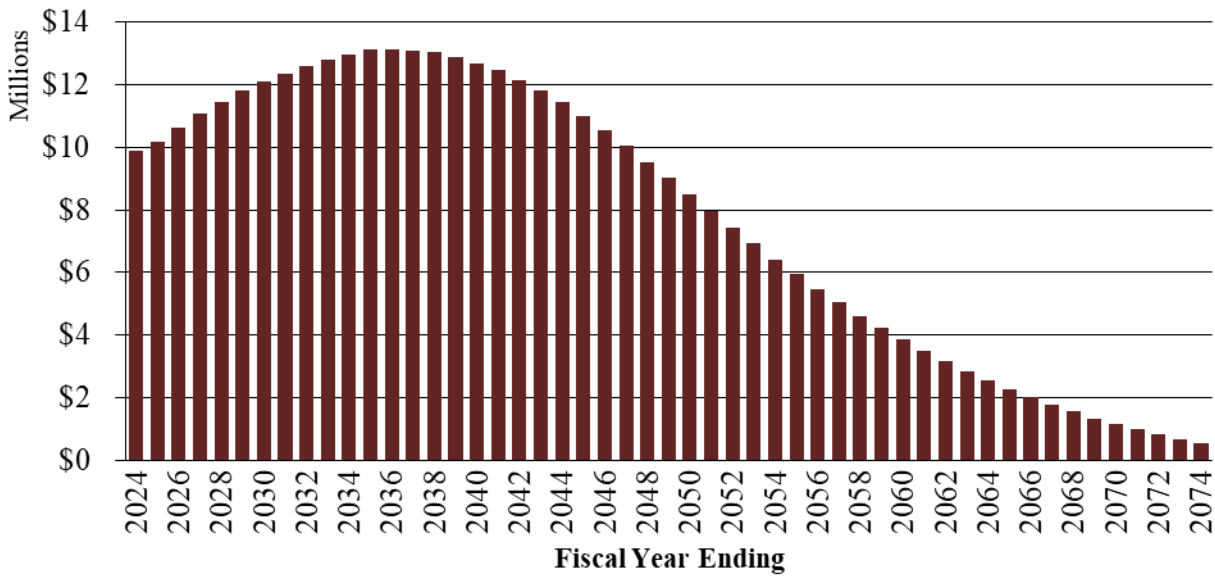
SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Assessing Costs and Risks

A closed pension plan will ultimately either end up with excess assets after all benefits have been paid or run out of assets before all benefits have been paid. If the Plan develops surplus assets, it may be able to reduce the risk in its investment portfolio, immunize investments, or purchase annuities to settle the remaining obligation. If the surplus assets exceed the additional amounts needed to purchase annuities or immunize the portfolio, it is not clear how they could be used until after all benefits have been paid.

If the Plan, on the other hand, were to run out of assets, TriMet would be forced to pay benefits directly on a pay-as-you-go basis. As long as TriMet can afford the pay-as-you-go costs, benefits would remain unchanged. The chart below shows a projection of expected benefit payments for the closed plan. The peak level of benefit payments is not expected to be reached until 2035.

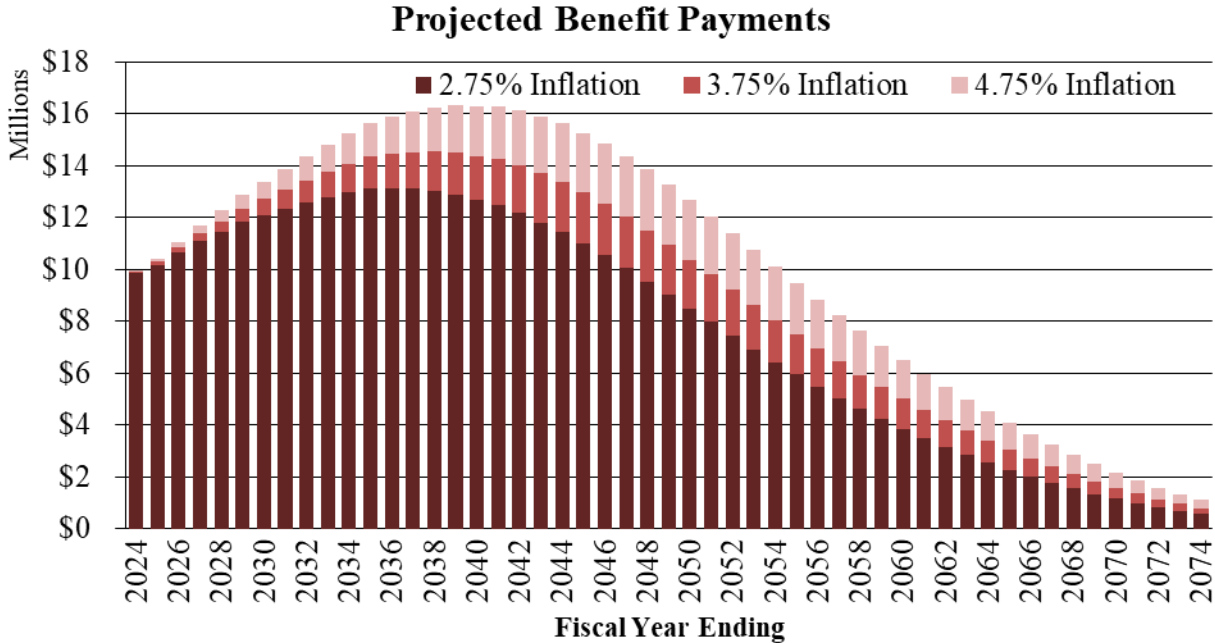
Projected Benefit Payments



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Sensitivity to Inflation

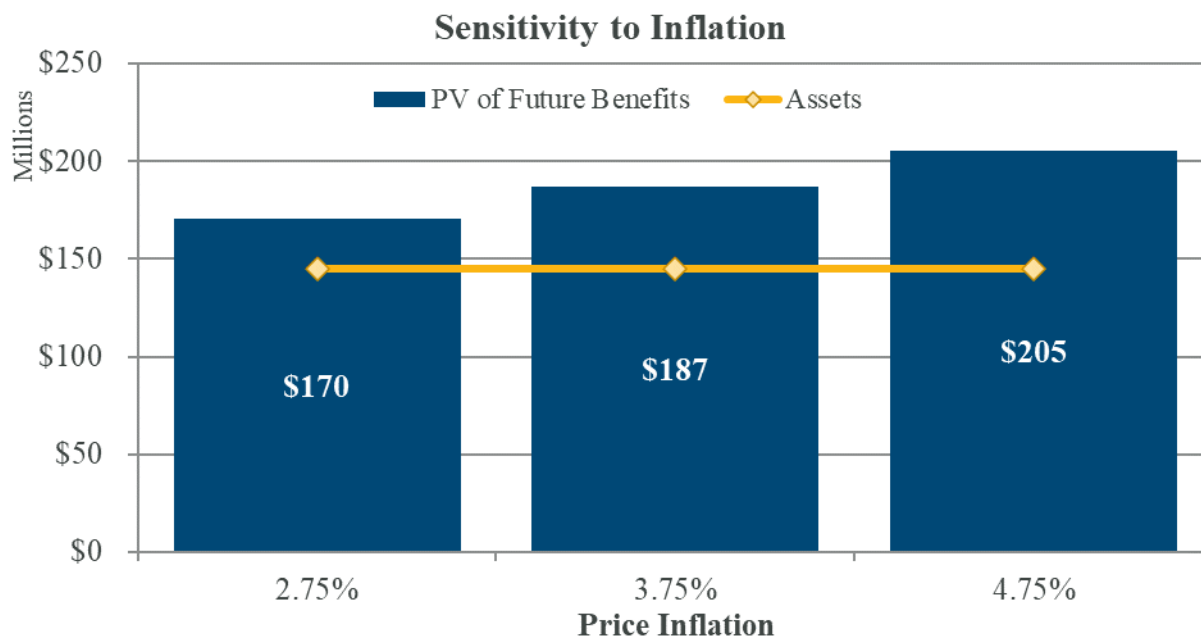
The chart below illustrates the sensitivity of projected benefit payments to inflation. The darkest bars show the projected benefit payments with the assumed inflation of 2.75%; the medium bars show the additional benefit payments if inflation is 3.75% each year; and, the lightest bars show the additional benefit payments if inflation is 4.75% each year.



Higher inflation could result in materially higher benefit payments that would require a greater amount of assets in the plan. The following chart compares assets to the present value of all projected future benefit payments assuming inflation of 2.75%, 3.75%, and 4.75%. The present value of future benefits is shown as a dark blue bar. The Market Value of Assets is shown by the gold line.

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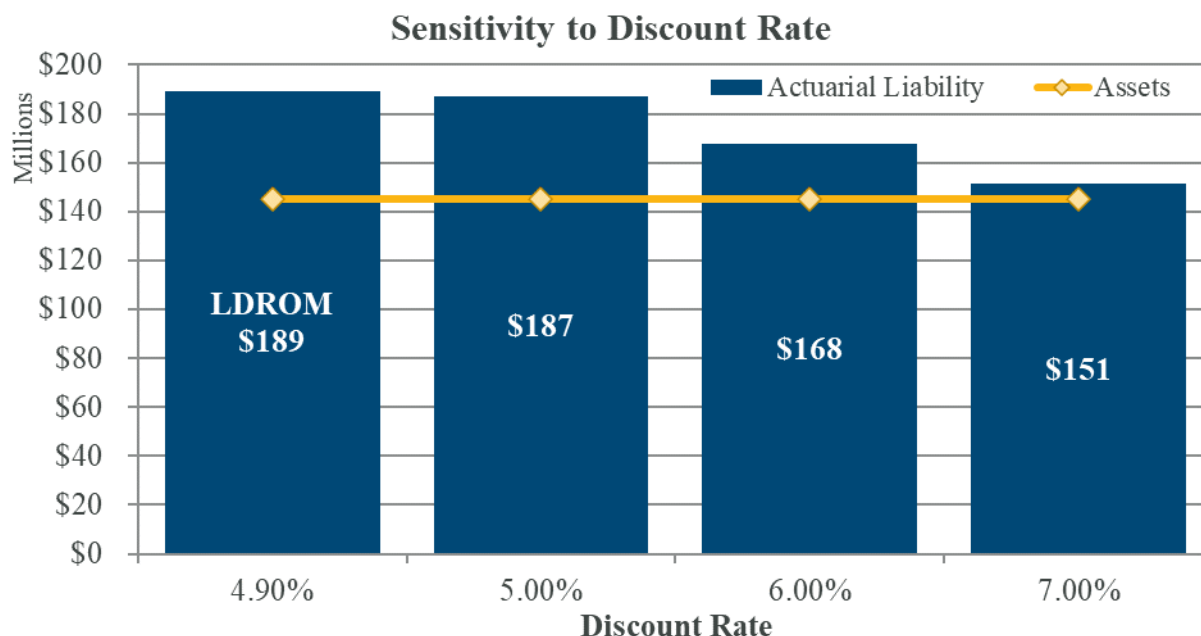


The COLA granted to retirees and beneficiaries receiving benefits is equal to 90 percent of the rate of inflation. If inflation is 2.75%, annual COLAs would be 2.475% and the Plan would need approximately \$170 million in assets today to pay all projected benefits compared to current assets of \$145 million. If inflation is 3.75%, annual COLAs would be 3.375%, and the Plan would need approximately \$187 million in assets today. Finally, if inflation is 4.75%, annual COLAs would be 4.275% and the Plan would need \$205 million in assets to pay all projected benefits. These estimates assume that all other assumptions are met.

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Sensitivity to Discount Rate

The chart below compares the Market Value of Assets (gold line) to the Actuarial Liability (blue bar) using discount rates equal to the current expected rate of return and 100 basis points above and below the expected rate of return. In addition, the chart shows the low-default-risk obligation measure (LDROM), which is the Actuarial Liability using a discount rate derived from low-default-risk fixed income securities that approximately match the benefit payments of the plan.



The Plan invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. If investments return 6.0% annually, the Plan would need approximately \$168 million in assets today to pay all benefits attributable to past service compared to current assets of \$145 million. If investment returns are only 5.0%, the Plan would need approximately \$187 million in assets today, and if investment returns are 7.0%, the Plan would only need \$151 million in assets. The lowest risk portfolio for a pension plan with fixed cash flows would be composed entirely of low-default-risk fixed income securities whose cash flows match the benefit cash flows of the Plan. As of June 30, 2023, we estimate that such a portfolio would have an expected return of 4.90%, and the Plan would need \$189 million to pay all benefits attributed to past service. This amount is the LDROM. The \$21 million difference between the LDROM and the Actuarial Liability at 6.00% represents the expected savings from bearing the risk of investing in the Plan’s diversified portfolio. Alternatively, it also represents the cost of eliminating the investment risk.

Because the Plan invests in a diversified portfolio and not the LDROM portfolio, the reported funded status is higher, and expected employer contributions are lower. Benefit security for members of the Plan depends on a combination of the Plan’s assets, the investment returns generated on those assets, and the ability of TriMet to make any needed future contributions. An LDROM portfolio would generate more predictable but lower expected investment returns, potentially changing the level of reliance on future TriMet contributions to secure benefits.

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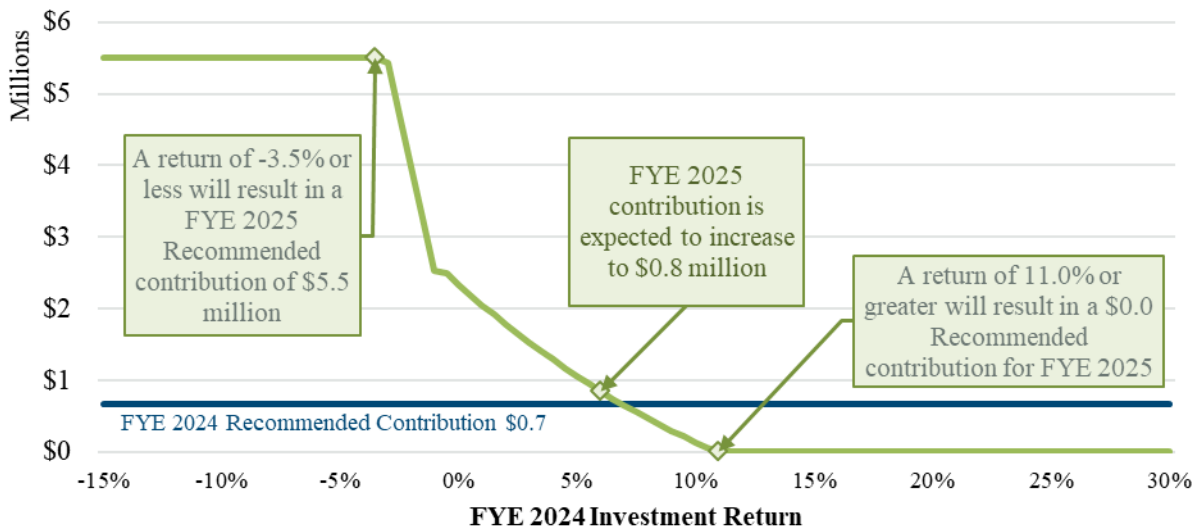
The liability measures shown on page 15; however, assume annual inflation of 2.75%. As noted, if annual inflation is higher; more assets would be needed to pay the benefits, and if inflation is lower; fewer assets would be needed to pay benefits. In this case, it is better to think of the sensitivity based on the investment return in excess of inflation. The assumption of 6.0% nominal investment returns and 2.75% inflation equates to a real investment return assumption of 3.25%. Similarly, expected nominal investment returns of 5.0% and 7.0% equate to 2.25% and 4.25% real investment returns, respectively.

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Sensitivity to Investment Returns

Contribution amounts are very sensitive to investment returns. The chart below shows the FYE 2025 contribution amount depending on the investment return earned during FYE 2024, assuming all other assumptions are met. While the Recommended contribution is expected to increase from \$0.7 million in FYE 2024 to \$0.8 million in FYE 2025, it could range anywhere from \$0 to \$5.5 million depending on investment returns for FYE 2024.

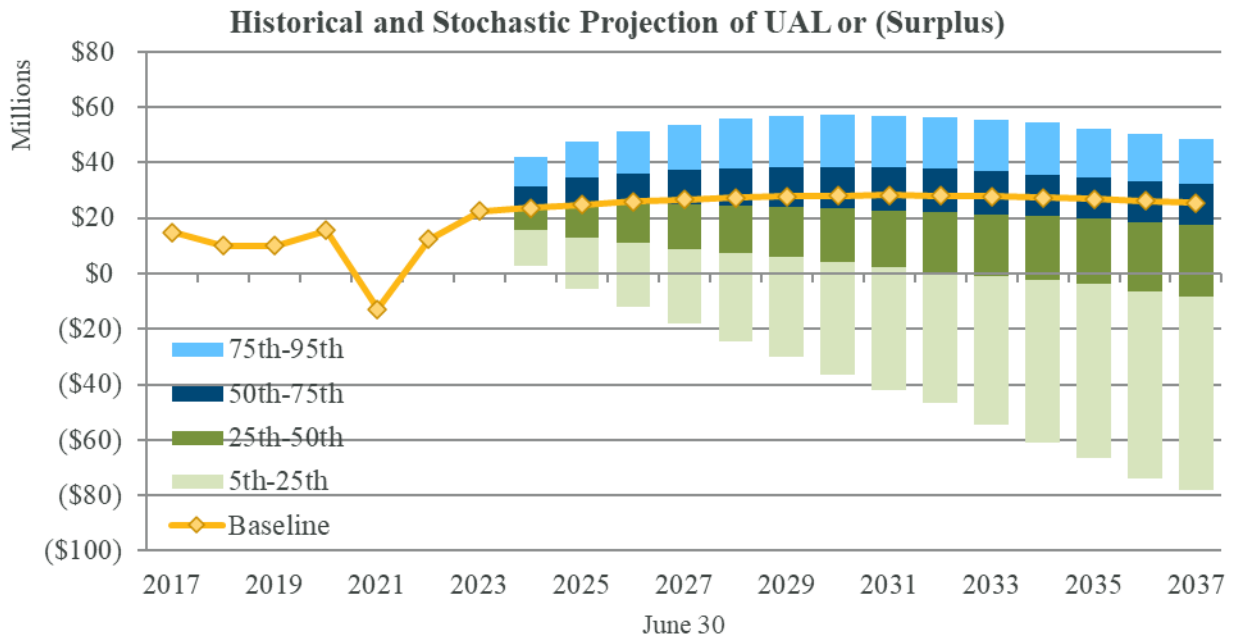
**Projected FYE 2025 Employer Contribution Amount
Based on FYE 2024 Investment Return**



While not likely in FYE 2025, in future years, Recommended contributions could exceed the \$5.5 million TriMet budget used for these projections. The stochastic projections of contributions shown at the bottom of the dashboard (page 1) shows the range of potential future Recommended contributions. This range is driven by the volatility of investment returns. The chart below shows the projected range of the UAL or surplus on the same basis. Surplus amounts are shown as negative numbers.

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The UAL is projected to remain above \$20 million for the next 15 years under the new funding policy and if all assumptions are met. However, there is a range of potential outcomes depending on actual investment returns. Poor investment returns could increase the UAL, but the funding policy increases contributions to pay for the larger UAL. Good investment returns, however, can grow the surplus unrestrained once the minimum contribution is \$0. The prior funding policy showed a potential surplus of up to \$168 million in 2036, but under the new funding policy the surplus in 2036 only reaches as high as \$74 million. On the other hand, in really poor investment scenarios under the new funding policy, the UAL in 2036 could reach \$50 million while the old funding policy limited the UAL in 2036 to \$21 million. Both the UAL and surplus could be further constrained by managing the investment policy.

More Detailed Assessment

While a more detailed assessment of risk is always valuable to enhance the understanding of the risks identified above, given the small size of the closed plan compared to TriMet and regular asset-liability studies, the advantages of a more detailed assessment may not justify its costs at this time.

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SECTION III – CERTIFICATION

The purpose of this report is to present the June 30, 2023 Actuarial Valuation of the TriMet Defined Benefit Retirement Plan for Management and Staff Employees (“Plan”). This report is for the use of the Plan and TriMet.

In preparing our report, we relied on information, some oral and some written, supplied by TriMet. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Most actuarial assumptions were selected by the Plan trustees based on our analysis and recommendations at the May 6, 2020 trustee meeting. Based on our recommendations, the economic assumptions were updated by the trustees at their June 13, 2022 meeting. Please refer to the presentations of the analysis at those meetings for the rationale for the assumptions.

The liability measures and funding ratios in this report are for the purpose of establishing contribution rates. These measures are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan’s benefit obligations.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

Cheiron utilizes ProVal actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have a basic understanding of ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this valuation.

Deterministic projections in this report were developed using P-scan, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the Plan. P-scan uses standard roll-forward techniques that implicitly assume a stable active population.

Stochastic projections in this presentation were developed using R-scan, our proprietary tool for assessing the probability of different outcomes based on the range of potential investment returns.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION III – CERTIFICATION

in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This report was prepared for the Plan and TriMet for the purposes described herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.



William R. Hallmark, ASA, EA, FCA, MAAA
Consulting Actuary



Steven M. Hastings, FSA, EA, FCA, MAAA
Consulting Actuary

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION IV – ASSETS

This section shows the changes in the Market Value of Assets and calculates the money-weighted investment return for GASB 67 and 68. In prior valuations, the Actuarial Value of Assets smoothed investment returns over a five-year period, but beginning with this valuation, the Actuarial Value of Assets is equal to the Market Value of Assets.

Statement of Change in Market Value of Assets

Table IV-1 shows the changes in the Market Value of Assets for the current and prior fiscal years.

Table IV-1

Change in Market Value of Assets		
	FYE 2023	FYE 2022
Market Value, Beginning of Year	\$ 148,261,434	\$ 158,721,106
Contributions	0	522,208
Net Investment Earnings	5,978,052	(2,136,569)
Benefit Payments	(8,969,022)	(8,749,955)
Administrative Expenses	(108,116)	(95,356)
Market Value, End of Year	\$ 145,162,348	\$ 148,261,434

The Market Value of Assets decreased from approximately \$148.3 million as of June 30, 2022 to \$145.2 million as of June 30, 2023. There were no contributions and investment earnings were less than benefit payments and administrative expenses by approximately \$3.1 million.

The rate of return during the year is calculated on a money-weighted basis, which reflects the effect of external cash flows (contributions less benefit payments and administrative expenses) on a monthly basis. Table IV-2 on the next page shows the external cash flows by month, the number of months each cash flow was considered invested, and the external cash flows with interest at the money-weighted rate of return of 4.22% to the end of the year. The sum of the external cash flows with interest equals the Market Value of Assets at the end of the year.

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SECTION IV – ASSETS

Table IV-2

Money-Weighted Rate of Return Fiscal Year Ending June 30, 2023			
	Net External Cash Flows	Months Invested	Net External Cash Flows With Interest
Beginning Value, July 1, 2022	\$ 148,261,434	12	\$ 154,408,264
<u>Monthly Net External Cash Flows</u>			
July	(735,376)	11	(763,276)
August	(738,780)	10	(764,217)
September	(746,582)	9	(769,678)
October	(736,961)	8	(757,192)
November	(775,652)	7	(794,252)
December	(745,308)	6	(760,601)
January	(738,831)	5	(751,443)
February	(732,987)	4	(742,980)
March	(739,430)	3	(746,978)
April	(792,580)	2	(797,964)
May	(791,047)	1	(793,729)
June	(803,605)	0	(803,605)
Ending Value, June 30, 2023			\$ 145,162,348
Money- Weighted Rate of Return	4.15%		

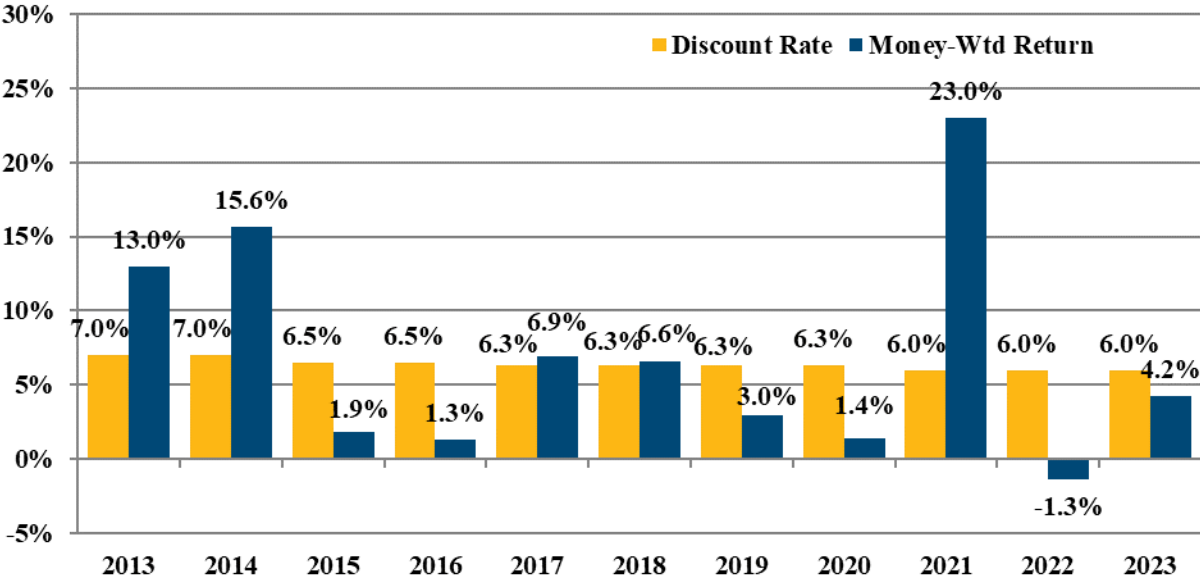
The money-weighted rate of return for the year ended June 30, 2023 was 4.15% compared to an expected return of 6.00%. As shown in the chart on the following page, over the last 10 years, the money-weighted rate of return² has varied significantly from 22.95% in 2021 to -1.3% in 2022. For FYE 2023, the 4.22% return compared to the expected return of 6.00% produced an investment loss of approximately \$2.6 million.

² Money-weighted returns prior to FYE 2014 were not calculated based on actual monthly external cash flows but estimated the timing of external cash flows throughout the year.

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SECTION IV – ASSETS

Historical Rates of Return



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SECTION V – MEASURES OF LIABILITY

This section presents detailed information on liability measures for the Plan for funding purposes, including:

- Present value of future benefits,
- Actuarial Liability, and
- Normal cost.

Present Value of Future Benefits: The present value of future benefits represents the expected amount of money needed today if all assumptions are met to pay for all benefits both earned as of the valuation date and expected to be earned in the future by current plan members under the current plan provisions. Table V-1 below shows the present value of future benefits as of the current and prior valuations.

Table V-1

Present Value of Future Benefits			
	June 30, 2023	June 30, 2022	% Change
Actives	\$ 37,694,953	\$ 37,855,339	-0.4%
Deferred	8,968,900	9,372,890	-4.3%
In Pay Status	<u>123,732,818</u>	<u>116,298,345</u>	<u>6.4%</u>
Total	\$ 170,396,671	\$ 163,526,574	4.2%

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION V – MEASURES OF LIABILITY

Actuarial Liability

The Actuarial Liability represents the expected amount of money needed today if all assumptions are met to pay for benefits attributed to service prior to the valuation date under the Entry Age Actuarial Cost Method. As such, it is the amount of assets targeted by the actuarial cost method for the Plan to hold as of the valuation date. It is not the amount necessary to settle the obligation. Under GASB 67 and 68, the Entry Age Actuarial Liability is referred to as the Total Pension Liability. Table V-2 below shows the Actuarial Liability as of the current and prior valuations.

Table V-2

Actuarial Liability			
	June 30, 2023	June 30, 2022	% Change
Actives			
Retirement	\$ 34,977,769	\$ 34,944,406	0.1%
Termination	(38,625)	(57,419)	-32.7%
Death	0	0	
Disability	0	0	
Total Actives	\$ 34,939,144	\$ 34,886,987	0.1%
Deferred			
Vested Terminated	\$ 8,132,899	\$ 8,470,242	-4.0%
Transfers	815,714	833,321	-2.1%
Leaves and Disabled	20,287	69,327	-70.7%
Total Deferred	\$ 8,968,900	\$ 9,372,890	-4.3%
In Pay Status	\$ 123,732,818	\$ 116,298,345	6.4%
Total	\$ 167,640,862	\$ 160,558,222	4.4%

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION V – MEASURES OF LIABILITY

The Actuarial Liability is expected to increase each year due to interest and the accrual of an additional year of service for active members. It is expected to decrease each year due to benefits that have been paid. Differences between the actual experience and assumed experience also contribute to the change in Actuarial Liability. Table V-3 provides a history of the experience gains and losses attributable to each of the primary demographic assumptions. Consistent patterns of gains or of losses provide an indication that an assumption may need to be updated.

Table V-3

History of Demographic (Gains) and Losses					
	Fiscal Year Ending				
	2019	2020	2021	2022	2023
Salary Increases	\$ 957,060	\$ 565,704	\$ (187,263)	\$ 2,626,921	\$ 2,445,920
Retirement	(82,660)	(389,591)	(207,128)	120,990	(169,338)
Termination	(624,206)	41,255	(158,737)	(376,371)	31,091
Mortality	375,551	515,435	(759,665)	(118,313)	180,084
COLAs	(578,726)	(159,486)	(702,979)	5,047,751	3,539,640
Other	349,880	354,498	318,775	(189,618)	68,964
Total	\$ 396,899	\$ 927,815	\$ (1,696,997)	\$ 7,111,360	\$ 6,096,361

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION V – MEASURES OF LIABILITY

Normal Cost

Under the Entry Age (EA) Actuarial Cost Method, the present value of future benefits for each individual is spread over the individual’s expected working career under the Plan as a level percentage of the individual’s expected pay. The normal cost rate is determined by taking the value, as of entry age into the Plan, of each member’s projected future benefits divided by the present value, also at entry age, of each member’s expected future salary. The normal cost rate is multiplied by current salary to determine each member’s normal cost. The normal cost of the Plan is the sum of the normal costs for each individual. The normal cost represents the expected amount of money needed to fund the benefits attributed to the next year of service under the Entry Age Actuarial Cost Method. Under GASB 67 and 68, the EA normal cost is referred to as the service cost. Table V-4 below shows the total normal cost as of the current and prior valuations.

Table V-4

Normal Cost			
	June 30, 2023	June 30, 2022	% Change
Retirement	\$ 473,022	\$ 506,849	-6.7%
Termination	40,488	46,886	-13.6%
Death	0	0	
Disability	0	0	
Total Normal Cost	\$ 513,510	\$ 553,735	-7.3%

SECTION VI - CONTRIBUTIONS

This section of the report develops minimum, maximum, and recommended contribution amounts in accordance with the Plan's Funding Policy. Because the Plan has been closed to new entrants since April 27, 2003, and the Actuarial Liability is projected to begin declining as benefits are paid out, the Plan's funding policy differs significantly from what would be used for an ongoing pension plan. The objective is to maintain a well-funded pension plan without developing a surplus that could not be used efficiently until all benefits have been paid. Consequently, the funding policy targets maintaining a funded ratio between 80% and 90% rather than the normal target of 100%.

Minimum Contribution

If the funded percentage is less than 80%, the minimum contribution is equal to the sum of:

- Normal cost,
- Assumed administrative expenses,
- 10-year layered amortization payment to reach 80% funded, and
- The UAL payment amount needed to maintain the UAL or funded percentage at 80%.

If the funded percentage is greater than or equal to 80%, the minimum contribution is \$0. In both the current and prior valuations, the funded percentage is greater than 80% and the minimum contribution is \$0.

Maximum Contribution

If the funded percentage is less than 80%, the maximum contribution is the amount needed to get the funded percentage to 80% in one year.

If the funded percentage is greater than or equal to 90%, the maximum contribution is \$0.

If the funded percentage is greater than or equal to 80% and less than 90%, the maximum contribution is the amount needed to "maintain funded status" which is defined as the sum of:

- Normal cost,
- Assumed administrative expenses, and
- The UAL payment amount needed to "maintain funded status."

The UAL payment amount needed to "maintain funded status" is defined as the greater of the amount needed to keep the UAL from growing as a dollar amount (interest on the UAL) and the amount needed to keep the funded percentage from declining (benefit payments times (1 minus funded percentage)). Table VI-1 shows the calculation of the maximum contribution for FYE 2024 as of the beginning of the fiscal year. In the prior valuation, the funded percentage was greater than 90%, so the maximum contribution was \$0.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VI - CONTRIBUTIONS

Table VI-1

Development of Maximum Contribution Payment Needed to Maintain Funded Status		FYE 2024
1. Normal Cost	\$	513,510
2. Administrative Expenses		97,129
3. Unfunded Actuarial Liability		22,478,514
4. Interest on (3)		1,272,369
5. Expected Benefit Payments (One Year)		9,872,044
6. Funded Percentage		86.6%
7. Unfunded Portion of Benefit Payments: (5) x [100% - (6)]		1,285,707
8. Payment Needed to Maintain Funded Status	\$	1,896,346
(1) + (2) + [Maximum of (4) and (7)]		

Recommended Contribution

If the funded percentage is less than 80%, the recommended contribution is the greater of the minimum contribution or TriMet’s budgeted amount for pension and OPEB trust contributions, but not more than the maximum contribution. We understand that TriMet’s current budgeted amount for pension and OPEB trust contributions is \$5.5 million.

If the funded percentage is greater than or equal to 90%, the maximum contribution is \$0.

If the funded percentage is between 80% and 90%, the recommended contribution is prorated from the maximum contribution if the plan is 80% funded to \$0 if the plan is 90% funded. Table VI-2 below shows the calculation of the Recommended contribution for FYE 2024 as of the beginning of the fiscal year.

Table VI-2

FYE 2024 Recommended Contribution				
	Contribution	Weight	Weighted Contribution	
Minimum	\$ 0	65.9%	\$ 0	
Maximum	1,896,346	34.1%	<u>646,414</u>	
Recommended			\$ 646,414	

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VI - CONTRIBUTIONS

Reasonable Actuarially Determined Contribution (Reasonable ADC)

The Plan’s funding policy will not always satisfy the requirements for a Reasonable ADC under the newly issued Actuarial Standards of Practice No. 4, particularly when the Plan is relatively well funded. For purposes of disclosing a Reasonable ADC, the Reasonable ADC will be defined as the greater of the minimum contribution described above or the sum of:

- Normal cost,
- Assumed administrative expenses, and
- A payment on the UAL equal to a 25-year amortization as a level percentage of payroll.

Note that the effective amortization period becomes shorter when the plan is less well funded due to the minimum contribution. This structure was selected to balance generational equity with the predictability and stability of contributions while also minimizing the likelihood of a surplus and ensuring assets are available to pay benefits when due. Table VI-3 below shows the calculation of the Reasonable ADC as of the beginning of the fiscal year.

Table VI-3

Development of Reasonable Actuarially Determined Contribution			
	FYE 2024	FYE 2023	% Change
1. Normal Cost	\$ 513,510	\$ 553,735	-7.3%
2. Administrative Expenses	97,129	97,129	0.0%
3. 25-Year Amortization Payment on UAL	<u>1,242,177</u>	<u>679,529</u>	82.8%
4. Preliminary Reasonable ADC	\$ 1,852,816	\$ 1,330,393	39.3%
5. Minimum Contribution	0	0	
6. Reasonable ADC [Max of (4) and (5)]	\$ 1,852,816	\$ 1,330,393	39.3%

Table VI-4 summarizes each contribution amount for FYE 2024 and 2023. The amounts are shown assuming contributions are made at the beginning of the fiscal year or at the beginning of each month.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VI - CONTRIBUTIONS

Table VI-4

Actuarially Determined Contribution Amounts					
	FYE 2024		FYE 2023		% Change
Funded Percentage		86.6%		92.3%	-5.7%
Minimum Contribution					
Beginning of Year	\$	0	\$	0	
Equivalent Monthly Contribution		0		0	
Annual Amount	\$	0	\$	0	
Maximum Contribution					
Beginning of Year	\$	1,896,346	\$	0	
Equivalent Monthly Contribution		162,283		0	
Annual Amount	\$	1,947,396	\$	0	
Recommended Contribution					
Beginning of Year	\$	646,414	\$	0	
Equivalent Monthly Contribution		55,318		0	
Annual Amount	\$	663,816	\$	0	
Reasonable ADC					
Beginning of Year	\$	1,852,816	\$	1,330,393	39.3%
Equivalent Monthly Contribution		158,558		113,851	39.3%
Annual Amount	\$	1,902,696	\$	1,366,212	39.3%

Annual Amount equals Equivalent Monthly Contribution x 12

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VII – GASB 67 AND 68 DISCLOSURES

This section of the report provides accounting and financial reporting information under Governmental Accounting Standards Board Statements 67 and 68 for the Plan and TriMet. This information includes:

- Determination of Discount Rate,
- Changes in the Net Pension Liability,
- Calculation of the Net Pension Liability at the discount rate as well as discount rates 1% higher and lower than the discount rate,
- Schedule of Employer Contributions,
- Disclosure of Deferred Inflows and Outflows, and
- Calculation of the Annual Pension Expense for TriMet.

Determination of Discount Rate

The discount rate used to measure the Total Pension Liability was 6.0%.

We have assumed that contributions to the Plan will follow the Recommended Contribution in the Plan's Funding Policy.

We performed a formal cash flow projection as described under Paragraph 41 of GASB Statement 67 which can be found in Appendix D. All benefit payments in the projection are paid from the Fiduciary Net Position. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VII – GASB 67 AND 68 DISCLOSURES

Note Disclosures

Table VII-1 below shows the changes in the Total Pension Liability, the Plan Fiduciary Net Position (i.e., fair value of Plan assets), and the Net Pension Liability during the Measurement Year.

Table VII-1

	Change in Net Pension Liability		
	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a) - (b)
Balances at 6/30/2022	\$ 160,558,222	\$ 148,261,434	\$ 12,296,788
Changes for the year:			
Service cost	553,735		553,735
Interest	9,401,566		9,401,566
Changes of benefits	0		0
Differences between expected and actual experience	6,096,361		6,096,361
Changes of assumptions	0		0
Contributions - employer		0	0
Contributions - member		0	0
Net investment income		5,978,052	(5,978,052)
Benefit payments	(8,969,022)	(8,969,022)	0
Administrative expense		(108,116)	108,116
Net changes	<u>\$ 7,082,640</u>	<u>\$ (3,099,086)</u>	<u>\$ 10,181,726</u>
Balances at 6/30/2023	<u>\$ 167,640,862</u>	<u>\$ 145,162,348</u>	<u>\$ 22,478,514</u>

During the measurement year, the NPL increased by approximately \$10.2 million. The service cost and interest cost increased the NPL by approximately \$10.0 million. Liability experience losses also increased the NPL by approximately \$6.1 million. Investment returns net of administrative expenses decreased the NPL by approximately \$5.9 million.

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SECTION VII – GASB 67 AND 68 DISCLOSURES

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL, and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The table below shows the sensitivity of the NPL to the discount rate.

Table VII-2

Sensitivity of Net Pension Liability to Changes in Discount Rate			
	1% Decrease 5.00%	Discount Rate 6.00%	1% Increase 7.00%
Total Pension Liability	\$ 187,132,795	\$ 167,640,862	\$ 151,270,526
Plan Fiduciary Net Position	<u>145,162,348</u>	<u>145,162,348</u>	<u>145,162,348</u>
Net Pension Liability	<u>\$ 41,970,447</u>	<u>\$ 22,478,514</u>	<u>\$ 6,108,178</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	77.6%	86.6%	96.0%

A one percent decrease in the discount rate increases the TPL by approximately 12% and increases the NPL by approximately 87%. A one percent increase in the discount rate decreases the TPL by approximately 10% and decreases the NPL by approximately 73%.

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SECTION VII – GASB 67 AND 68 DISCLOSURES

Required Supplementary Information

The schedules below and on the following page show the changes in NPL and related ratios required by GASB for the last 10 years.

Table VII-3a

Schedule of Changes in Net Pension Liability and Related Ratios					
	FYE 2023	FYE 2022	FYE 2021	FYE 2020	FYE 2019
<u>Total Pension Liability (TPL)</u>					
Service cost	\$ 553,735	\$ 547,822	\$ 633,466	\$ 650,713	\$ 685,276
Interest	9,401,566	8,531,083	8,603,520	8,938,724	8,784,109
Changes of benefit terms expected and actual experience	0	0	(32,015)	0	0
Changes of assumptions	6,096,361	7,111,360	(1,696,996)	927,815	396,899
Benefit payments, including refunds	0	7,169,761	0	(958,655)	0
	<u>(8,969,022)</u>	<u>(8,749,955)</u>	<u>(8,512,730)</u>	<u>(7,563,462)</u>	<u>(7,197,158)</u>
Net change in TPL	\$ 7,082,640	\$ 14,610,071	\$ (1,004,755)	\$ 1,995,135	\$ 2,669,126
TPL - beginning	<u>160,558,222</u>	<u>145,948,151</u>	<u>146,952,906</u>	<u>144,957,771</u>	<u>142,288,645</u>
TPL - ending	<u>\$ 167,640,862</u>	<u>\$ 160,558,222</u>	<u>\$ 145,948,151</u>	<u>\$ 146,952,906</u>	<u>\$ 144,957,771</u>
<u>Plan fiduciary net position</u>					
Contributions - employer	\$ 0	\$ 522,208	\$ 6,250,264	\$ 2,327,160	\$ 6,240,470
Contributions - member	0	0	0	0	0
Net investment income	5,978,052	(2,136,569)	29,801,322	1,726,906	3,786,540
Benefit payments, including refunds	(8,969,022)	(8,749,955)	(8,512,730)	(7,563,462)	(7,197,158)
Administrative expense	(108,116)	(95,356)	(109,851)	(144,268)	(136,675)
Net change in plan fiduciary net position	\$ (3,099,086)	\$ (10,459,672)	\$ 27,429,005	\$ (3,653,664)	\$ 2,693,177
Plan fiduciary net position - beginning	<u>148,261,434</u>	<u>158,721,106</u>	<u>131,292,101</u>	<u>134,945,765</u>	<u>132,252,588</u>
Plan fiduciary net position - ending	<u>\$ 145,162,348</u>	<u>\$ 148,261,434</u>	<u>\$ 158,721,106</u>	<u>\$ 131,292,101</u>	<u>\$ 134,945,765</u>
ending	<u>\$ 22,478,514</u>	<u>\$ 12,296,788</u>	<u>\$ (12,772,955)</u>	<u>\$ 15,660,805</u>	<u>\$ 10,012,006</u>
Plan fiduciary net position as a percentage of the TPL	86.6%	92.3%	108.8%	89.3%	93.1%
Covered payroll	\$ 7,640,705	\$ 7,462,831	\$ 7,964,901	\$ 8,104,672	\$ 8,279,708
Net pension liability as a percentage of covered payroll	294.2%	164.8%	-160.4%	193.2%	120.9%

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SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-3b

Schedule of Changes in Net Pension Liability and Related Ratios					
	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014
<u>Total Pension Liability (TPL)</u>					
Service cost	\$ 919,497	\$ 1,161,815	\$ 1,224,152	\$ 505,463	\$ 793,111
Interest	8,621,492	8,308,518	8,326,815	7,931,015	8,453,556
Changes of benefit terms expected and actual experience	0 (28,774)	0 1,441,063	0 (1,292,524)	0 3,591,955	0 (3,002,079)
Changes of assumptions	0	0	474,280	(2,177,859)	(531,299)
Benefit payments, including refunds	<u>(6,211,442)</u>	<u>(5,285,890)</u>	<u>(4,502,096)</u>	<u>(4,457,981)</u>	<u>(3,892,235)</u>
Net change in TPL	\$ 3,300,773	\$ 5,625,506	\$ 4,230,627	\$ 5,392,593	\$ 1,821,054
TPL - beginning	<u>138,987,872</u>	<u>133,362,366</u>	<u>129,131,739</u>	<u>123,739,146</u>	<u>121,918,092</u>
TPL - ending	<u>\$142,288,645</u>	<u>\$138,987,872</u>	<u>\$133,362,366</u>	<u>\$129,131,739</u>	<u>\$123,739,146</u>
<u>Plan fiduciary net position</u>					
Contributions - employer	\$ 6,496,842	\$ 6,330,108	\$ 7,036,203	\$ 6,559,317	\$ 5,601,963
Contributions - member	0	0	0	0	0
Net investment income	8,108,016	7,990,589	1,459,796	2,003,914	14,073,839
Benefit payments, including refunds	(6,211,442)	(5,285,890)	(4,502,096)	(4,457,981)	(3,892,235)
Administrative expense	<u>(96,686)</u>	<u>(76,230)</u>	<u>(96,799)</u>	<u>(123,346)</u>	<u>0</u>
Net change in plan fiduciary net position	\$ 8,296,730	\$ 8,958,577	\$ 3,897,104	\$ 3,981,904	\$ 15,783,567
Plan fiduciary net position - beginning	<u>123,955,858</u>	<u>114,997,281</u>	<u>111,100,177</u>	<u>107,118,273</u>	<u>91,334,706</u>
Plan fiduciary net position - ending	<u>\$132,252,588</u>	<u>\$123,955,858</u>	<u>\$114,997,281</u>	<u>\$111,100,177</u>	<u>\$107,118,273</u>
ending	<u>\$ 10,036,057</u>	<u>\$ 15,032,014</u>	<u>\$ 18,365,085</u>	<u>\$ 18,031,562</u>	<u>\$ 16,620,873</u>
Plan fiduciary net position as a percentage of the TPL	92.9%	89.2%	86.2%	86.0%	86.6%
Covered payroll	\$ 9,445,518	\$ 10,592,830	\$ 12,722,153	\$ 12,751,216	\$ 13,141,852
Net pension liability as a percentage of covered payroll	106.3%	141.9%	144.4%	141.4%	126.5%

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VII – GASB 67 AND 68 DISCLOSURES

The schedule below compares the Actuarially Determined Contribution (ADC) to actual contributions.

Table VII-4

Schedule of Employer Contributions					
	FYE 2023	FYE 2022	FYE 2021	FYE 2020	FYE 2019
Actuarially Determined Contribution	\$ 0	\$ 197,340	\$ 3,569,676	\$ 2,327,160	\$ 2,442,684
Contributions in Relation to the Actuarially Determined Contribution	0	522,208	6,250,264	2,327,160	6,240,470
Contribution Deficiency/(Excess)	\$ 0	\$ (324,868)	\$ (2,680,588)	\$ 0	\$ (3,797,786)
Covered Payroll	\$ 7,640,705	\$ 7,462,831	\$ 7,964,901	\$ 8,104,672	\$ 8,279,708
Contributions as a Percentage of Covered Payroll	0.00%	7.00%	78.47%	28.71%	75.37%
	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014
Actuarially Determined Contribution	\$ 3,252,729	\$ 3,734,975	\$ 4,242,000	\$ 4,219,000	\$ 4,957,000
Contributions in Relation to the Actuarially Determined Contribution	6,496,842	6,330,108	7,036,203	6,559,317	5,601,963
Contribution Deficiency/(Excess)	\$ (3,244,113)	\$ (2,595,133)	\$ (2,794,203)	\$ (2,340,317)	\$ (644,963)
Covered Payroll	\$ 9,445,518	\$ 10,592,830	\$ 12,722,153	\$ 12,751,216	\$ 13,141,852
Contributions as a Percentage of Covered Payroll	68.78%	59.76%	55.31%	51.44%	42.63%

Key methods and assumptions used to determine the ADC for FYE 2023. A complete description of the assumptions can be found in the 2022 actuarial valuation report. The TriMet Board adopted changes to its funding policy after the 2022 valuation report was issued that affected the ADC for FYE 2023. A full description of those methods is contained in this valuation report.

Actuarial Cost Method	Individual Entry Age as a level percent of pay
Asset Valuation Method	The actuarial value of assets is equal to the market value
Amortization Method	Layered 10-year periods as a level dollar amount to achieve at least 80% funding.
Other	No contributions if funded ratio is 90% or higher
Discount Rate	6.00%
Salary Increases	3.00%

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VII – GASB 67 AND 68 DISCLOSURES

Inflation	2.75%
Healthy Mortality	PubG-2010(A) Mortality Table with generational mortality projection using MP-2019

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023**

SECTION VII – GASB 67 AND 68 DISCLOSURES

Employer Accounting

The schedules in this section are to be used by TriMet for its employer accounting for FYE 2023. These schedules develop the annual pension expense, including the amounts of deferred inflows and outflows. Experience gains and losses and assumption changes are recognized over the average future working life of active and inactive members, which is one year. Investment gains and losses are recognized over five years.

The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years.

Table VII-5

Schedule of Deferred Inflows and Outflows of Resources		
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 0	\$ 0
Changes in assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	1,491,679	0
Total	<u>\$ 1,491,679</u>	<u>\$ 0</u>
Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:		
Measurement year ended June 30:		
2024	\$ (264,619)	
2025	(1,586,172)	
2026	2,812,612	
2027	529,858	
2028	0	
Thereafter	\$ 0	

The tables on the following pages provide details on the current balances of deferred inflows and outflows of resources along with the recognition of each base for each of the current and following five years, as well as the total for any years thereafter.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-6

Recognition of Experience (Gains) and Losses											
Experience Year	Recognition Period	Total Amount	Beginning	Ending	Recognition Year						
			Remaining Amount	Remaining Amount	2023	2024	2025	2026	2027	The reafter	
2023	1.0	\$ 6,096,361	\$ 6,096,361	\$ 0	\$ 6,096,361	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Deferred Outflows			6,096,361	0	6,096,361	0	0	0	0	0	0
Deferred (Inflows)			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net Change in Pension Expense			\$ 6,096,361	\$ 0	\$ 6,096,361	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

Table VII-7

Recognition of Assumption Changes											
Change Year	Recognition Period	Total Amount	Beginning	Ending	Recognition Year						
			Remaining Amount	Remaining Amount	2023	2024	2025	2026	2027	The reafter	
2023	1.0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Deferred Outflows			0	0	0	0	0	0	0	0	0
Deferred (Inflows)			<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net Change in Pension Expense			\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023**

SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-8

Recognition of Investment (Gains) and Losses										
Experience Year	Recognition Period	Total Amount	Beginning	Ending	Recognition Year					
			Remaining Amount	Remaining Amount	2023	2024	2025	2026	2027	Thereafter
2023	5.0	\$ 2,649,286	\$ 2,649,286	\$ 2,119,429	\$ 529,857	\$ 529,857	\$ 529,857	\$ 529,857	\$ 529,858	\$ 0
2022	5.0	11,413,779	9,131,023	6,848,267	2,282,756	2,282,756	2,282,756	2,282,755	0	0
2021	5.0	(21,993,929)	(13,196,357)	(8,797,571)	(4,398,786)	(4,398,786)	(4,398,785)	0	0	0
2020	5.0	6,607,778	2,643,110	1,321,554	1,321,556	1,321,554	0	0	0	0
2019	5.0	4,511,458	902,290	0	902,290	0	0	0	0	0
Net Change in Pension Expense			\$ 2,129,352	\$ 1,491,679	\$ 637,673	\$ (264,619)	\$(1,586,172)	\$ 2,812,612	\$ 529,858	\$ 0

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VII – GASB 67 AND 68 DISCLOSURES

The annual pension expense recognized by TriMet can be calculated two different ways. First, it is the change in the amounts reported on TriMet’s Statement of Net Position that relate to the Plan and are not attributable to employer contributions. That is, it is the change in NPL plus the changes in deferred outflows and inflows plus employer contributions.

Alternatively, annual pension expense can be calculated by its individual components. While GASB does not require or suggest the organization of the individual components shown in the table on the following page, we believe it helps to understand the level and volatility of pension expense.

Table VII-9

Calculation of Pension Expense			
	Measurement Year Ending		
	2024	2023	2022
Change in Net Pension Liability	\$ 1,312,548	\$ 10,181,726	\$ 25,069,743
Change in Deferred Outflows	(264,619)	(1,491,679)	0
Change in Deferred Inflows	0	(519,934)	(11,364,548)
Employer Contributions	<u>663,816</u>	<u>0</u>	<u>522,208</u>
Pension Expense	\$ 1,711,745	\$ 8,170,113	\$ 14,227,403
Operating Expenses			
Service cost	\$ 513,511	\$ 553,735	\$ 547,822
Employee contributions	0	0	0
Administrative expenses	<u>100,000</u>	<u>108,116</u>	<u>95,356</u>
Total	\$ 613,511	\$ 661,851	\$ 643,178
Financing Expenses			
Interest cost	\$ 9,797,415	\$ 9,401,566	\$ 8,531,083
Expected return on assets	<u>(8,434,562)</u>	<u>(8,627,338)</u>	<u>(9,277,210)</u>
Total	\$ 1,362,853	\$ 774,228	\$ (746,127)
Changes			
Benefit changes	\$ 0	\$ 0	\$ 0
Recognition of assumption changes	0	0	7,169,761
Recognition of liability gains and losses	0	6,096,361	7,111,360
Recognition of investment gains and losses	<u>(264,619)</u>	<u>637,673</u>	<u>49,231</u>
Total	\$ (264,619)	\$ 6,734,034	\$ 14,330,352
Pension Expense	\$ 1,711,745	\$ 8,170,113	\$ 14,227,403

Figures for the 2024 measurement year are projected

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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SECTION VII – GASB 67 AND 68 DISCLOSURES

Operating expenses are items directly attributable to the operation of the plan during the measurement year. Service cost less employee contributions represents the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating the plan for the year.

Financing expenses equal the interest on the Total Pension Liability less the expected return on assets. Since the discount rate is equal to the long-term expected return on assets, the financing expense is primarily the interest on the Net Pension Liability with an adjustment for the difference between the interest on the service cost and contributions.

The recognition of changes drives most of the volatility in pension expense from year to year. Changes include any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses.

The total pension expense decreased from the prior year by about \$6.1 million. While operating expenses and financing expenses increased \$1.5 million, the recognition of changes decreased \$7.6 million due primarily to the recognition of assumption changes in the prior year.

The projected expense for FYE 2024 reflects a decrease in operating expenses as members are expected to retire, an increase in financing expenses due to experience losses, and a decrease to the recognition of changes as the 2023 liability losses and 2019 investment losses are fully recognized this year. Actual experience during FYE 2024 may have a significant impact on this projection.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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APPENDIX A – MEMBERSHIP INFORMATION

Data Assumptions and Methods

In preparing our data, we relied on information supplied by TriMet. This information includes, but is not limited to, plan provisions, employee data, and financial information. Our methodology for obtaining the data used for the valuation is based upon the following assumptions and practices:

- All active employees are assumed to accrue a full year of service in all future years.
- The most recent annual salary for actives is calculated to be “Hourly Rate” multiplied by 2,080.
- The annual benefit for inactives is set to be the accrued benefit provided. If an accrued benefit is not provided, then the annual benefit is calculated to be 1.75% of final compensation per year of credited service, plus one half of the hours in their Sick Leave Bank, divided by 101.9, multiplied by their “Hourly Rate.” The final compensation is adjusted for a three-year average.

Table A-1

Active Member Data			
	June 30, 2023	June 30, 2022	% Change
Count			
Accruing Service	38	44	-13.6%
Frozen Service	13	13	0.0%
Total	51	57	-10.5%
Average Current Age	58.0	57.5	0.9%
Average Eligibility Service	27.7	27.0	2.6%
Average Benefit Service	19.5	19.7	-1.0%
Annual Expected Pensionable Earnings	\$ 7,058,984	\$ 6,989,037	1.0%
Average Expected Pensionable Earnings	\$ 138,411	\$ 122,615	12.9%

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-2

In Pay Status Member Data			
	June 30, 2023	June 30, 2022	% Change
Retired & Disabled			
Count	325	322	0.9%
Average Age	72.6	72.2	0.6%
Total Annualized Benefits	\$ 9,067,058	\$ 8,371,837	8.3%
Average Annual Benefit	\$ 27,899	\$ 25,999	7.3%
Beneficiaries & Alternate Payees			
Count	27	25	8.0%
Average Age	73.8	73.3	0.7%
Total Annualized Benefits	\$ 338,494	\$ 298,807	13.3%
Average Annual Benefit	\$ 12,537	\$ 11,952	4.9%
Total			
Count	352	347	1.4%
Average Age	72.7	72.2	0.7%
Total Annualized Benefits	\$ 9,405,552	\$ 8,670,644	8.5%
Average Annual Benefit	\$ 26,720	\$ 24,987	6.9%

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-3

Deferred Member Data			
	June 30, 2023	June 30, 2022	% Change
Vested Terminated Members			
Count	45	50	-10.0%
Average Age	59.0	58.6	0.6%
Total Annualized Benefits	\$ 657,473	\$ 701,312	-6.3%
Average Annual Benefit	\$ 14,611	\$ 14,026	4.2%
Transfers to Union			
Count	10	12	-16.7%
Average Age	55.9	55.7	0.3%
Disability			
Count	0	0	N/A
Average Age			N/A
Deferred Beneficiaries			
Count	0	0	N/A
Average Age			N/A

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-4

Change in Plan Membership									
	Active	Active Frozen	Terminated Vested	Transfer to Union	Transfer to Union - Disabled	Retiree	Beneficiary	Alternate Payee	Totals
June 30, 2022	44	13	50	10	2	322	21	4	466
New Entrants	0	0	0	0	0	0	0	0	0
Rehires	0	0	0	0	0	0	0	0	0
Vested Terminations	0	0	1	(1)	0	0	0	0	0
Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(6)	0	(6)	0	0	12	0	0	0
Deaths	0	0	0	0	0	(9)	(1)	0	(10)
New Beneficiaries	0	0	0	0	0	0	2	1	3
Benefit Ceased/Lump Sum	0	0	0	0	0	0	0	0	0
Transfers to Union	0	0	0	0	0	0	0	0	0
Adjustments	0	0	0	0	(1)	0	0	0	(1)
June 30, 2023	38	13	45	9	1	325	22	5	458

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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APPENDIX A – MEMBERSHIP INFORMATION

Table A-5

Distribution of Active Members as of June 30, 2023												
Age	Years of Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 45	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	1	3	0	0	1	0	0	0	0	0	0	5
50 to 54	0	4	1	0	1	3	1	1	0	0	0	11
55 to 59	0	0	3	2	1	3	5	2	2	2	0	18
60 to 64	0	0	1	0	1	7	1	0	1	1	0	11
65 to 69	0	0	0	1	1	2	0	0	0	0	1	5
70 and up	0	0	0	0	0	0	1	0	0	0	0	1
Total Count	1	7	5	3	5	15	8	3	3	3	1	51

Table A-6

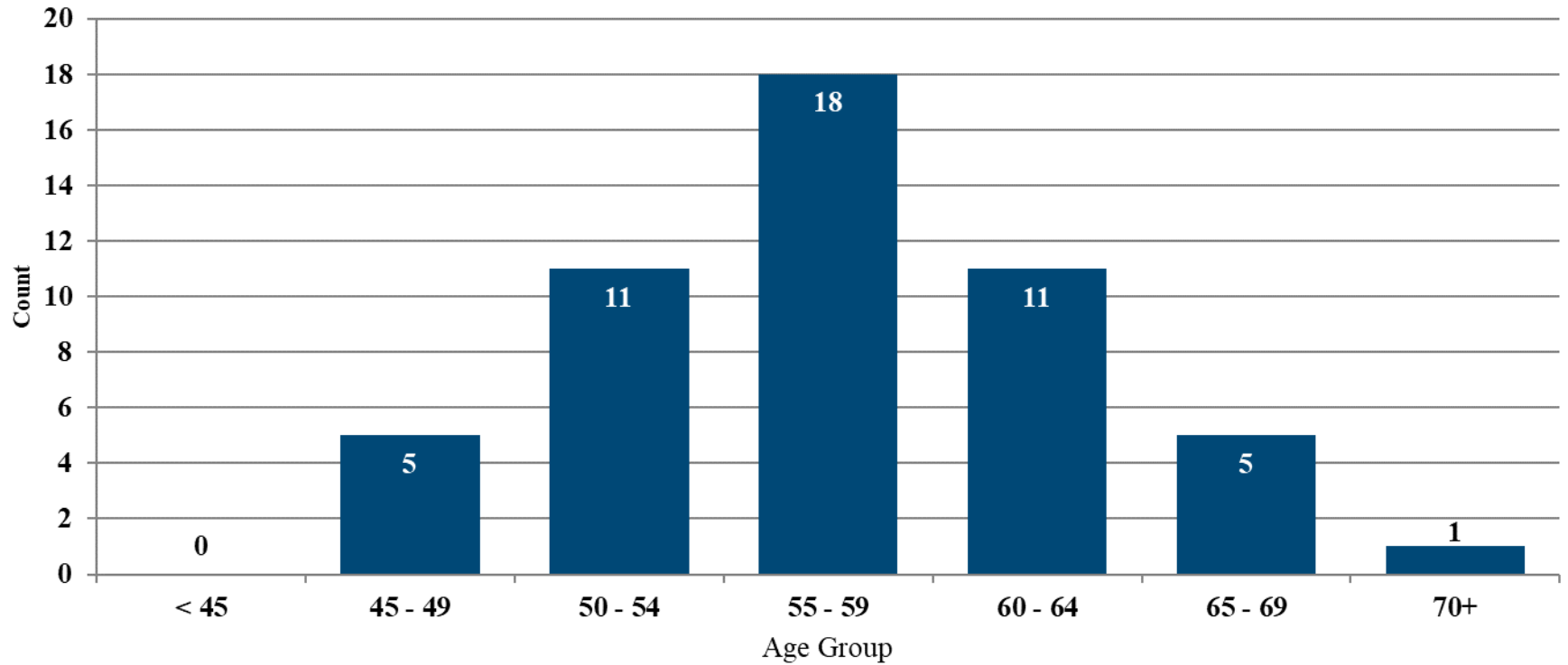
Distribution of Active Members Average Expected Salary as of June 30, 2023												
Age	Years of Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 45	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	111,764	157,371	0	0	139,422	0	0	0	0	0	0	144,660
50 to 54	0	146,140	126,894	0	117,838	181,107	132,248	134,010	0	0	0	148,988
55 to 59	0	0	136,761	122,504	112,376	123,793	141,351	117,141	182,086	0	0	135,792
60 to 64	0	0	145,095	0	110,380	127,589	142,940	0	148,019	0	0	130,869
65 to 69	0	0	0	123,861	120,811	134,619	0	0	0	153,278	0	133,437
70 and up	0	0	0	0	0	0	145,820	0	0	0	0	145,820
Avg. Salary	\$ 111,764	\$ 150,953	\$ 136,455	\$ 122,956	\$ 120,165	\$ 138,470	\$ 140,971	\$ 122,764	\$ 170,730	\$ 153,278	\$ 153,278	\$ 138,411

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023**

APPENDIX A – MEMBERSHIP INFORMATION

Chart A-1

Active Count Distribution



**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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APPENDIX A – MEMBERSHIP INFORMATION

Table A-7

Retirees and Beneficiaries by Attained Age and Benefit Effective Date as of June 30, 2023										
FYE Benefit Effective	Under 55	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 Plus	Total
Prior to 1995	0	0	0	0	0	0	0	2	4	6
1996	0	0	0	0	1	0	0	1	0	2
1997	0	0	0	0	0	0	3	1	1	5
1998	0	0	0	0	0	0	1	1	0	2
1999	0	0	0	0	0	1	2	1	0	4
2000	0	0	0	0	0	0	0	1	0	1
2001	0	0	0	0	0	0	1	0	0	1
2002	0	0	0	0	0	1	2	0	0	3
2003	0	0	0	0	1	3	3	1	0	8
2004	0	0	0	0	0	7	6	1	0	14
2005	0	0	0	0	1	1	3	0	0	5
2006	0	0	0	0	2	7	0	0	0	9
2007	0	0	0	0	3	2	0	0	0	5
2008	0	0	0	0	4	11	1	0	0	16
2009	0	0	0	2	7	5	2	0	0	16
2010	0	0	0	0	6	5	0	0	0	11
2011	0	0	1	0	2	5	0	0	0	8
2012	0	0	0	2	18	3	0	0	0	23
2013	0	0	0	2	14	6	0	0	0	22
2014	0	0	0	2	19	3	0	0	0	24
2015	0	0	1	4	14	0	0	0	0	19
2016	0	0	0	10	4	1	1	0	0	16
2017	0	0	1	17	17	0	0	0	0	35
2018	0	0	5	16	7	2	0	0	0	30
2019	0	0	0	10	4	1	0	0	0	15
2020	0	0	3	15	1	0	1	0	0	20
2021	0	0	7	6	0	0	0	0	0	13
2022	0	0	8	1	0	0	0	0	1	10
2023	0	2	4	1	2	0	0	0	0	9
Total	0	2	30	88	127	64	26	9	6	352
Average Age at Retirement					62.1					
Average Current Age					72.7					
Average Annual Pension		\$			26,720					

TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
 ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

APPENDIX A – MEMBERSHIP INFORMATION

Chart A-2

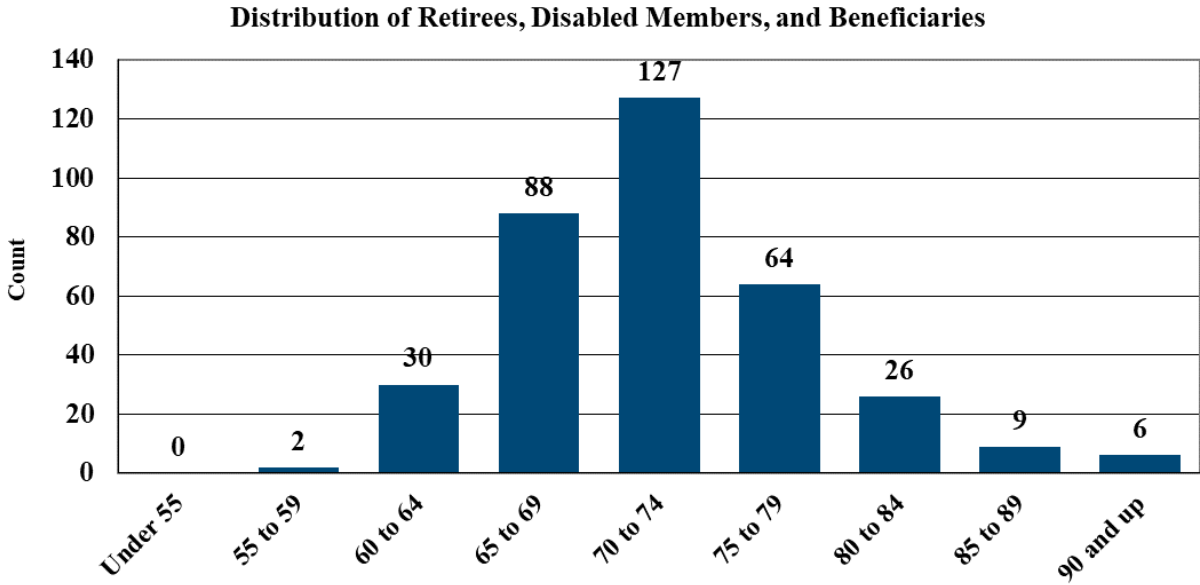
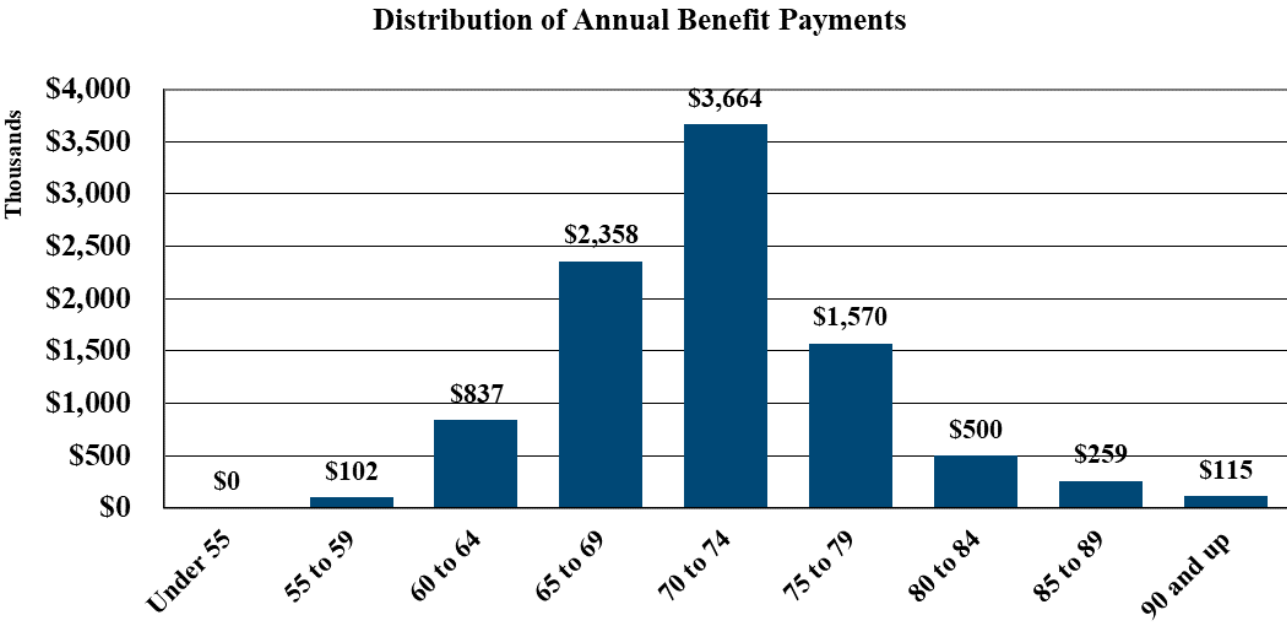


Chart A-3



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Assumptions

The inflation and salary increase assumptions were adopted by the trustees at their June 13, 2022 meeting based on our recommendations. Other actuarial assumptions were selected by the Plan trustees based on our analysis, review, and recommendations at the May 6, 2020 trustee meeting. Please refer to our presentations for the rationale for each assumption. More detail on the rationale for assumptions that were not changed can be found in the analyses performed by the prior actuary and communicated in letters dated May 14, 2015, February 18, 2016, and May 31, 2017.

1. Long-Term Expected Return on Assets (effective June 30, 2020)

6.00% compounded annually net of investment management and custodial fees.

2. Low-Default-Risk Obligation Measure Discount Rate (effective June 30, 2023)

The discount rate used to calculate the Low-Default-Risk Obligation Measure (LDROM) is calculated as the single equivalent rate from matching projected future benefit cash flows to the FTSE Pension Discount Curve as of June 30th. This curve was selected because it reflects the types of fixed income securities the Plan would likely invest in if the Trustees wanted to match cash flows. The single equivalent rate for this valuation is 4.90%.

3. Salary Increases (effective June 30, 2022)

3.00%, compounded annually.

4. Price Inflation (effective June 30, 2022)

2.75%, compounded annually.

5. Post-Retirement Benefit Increases (effective June 30, 2022)

2.475% (90% of price inflation), compounded annually and effective each April 1.

6. Administrative Expenses (effective June 30, 2016)

\$100,000 per year payable midyear.

7. Mortality (effective June 30, 2020)

Pre-Retirement and Pre-Disability: None.

Post-Retirement: PubG-2010(A) with generational projection using MP-2019.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

8. Rates of Retirement (effective June 30, 2015)

All active and disabled participants are assumed to retire by age 67. The assumed annual rates of retirement from active status are as follows:

Active Rates of Retirement			
Age	Rate	Age	Rate
55 – 57	2.0%	62	35.0%
58 – 60	7.0	63 – 66	30.0
61	15.0	67	100.0

Terminated vested members are assumed to retire at age 62, or present age if greater.

9. Form of Benefit (effective June 30, 2015)

Upon retirement, participants are assumed to elect the following form of payment:

Form of Payment	Election Rate
Single Life Annuity	50.0%
66 2/3% Joint & Survivor Annuity	50.0

10. Rates of Disability (effective June 30, 2015)

None.

11. Rates of Termination (effective June 30, 2015)

Participants are assumed to leave active employment for reasons other than retirement and death. Assumed termination rates are shown below:

Rates of Termination	
Years of Vesting Service	Rate
2 or less	12.0%
3 – 4	9.0
5 – 6	5.0
7 – 10	3.5
11 – 15	2.5
16 or more	1.0

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

12. Unused Sick Leave Benefits (effective June 30, 2020)

Active participants are assumed to increase their current bank of sick leave by 45 hours per year in future years. The schedule of maximum accumulated sick leave hours is shown in Appendix C. At retirement, active members are assumed to elect to convert their unused sick leave into a monthly annuity supplement.

13. Probability of Marriage/Domestic Partner (effective June 30, 2015)

85% of non-retired participants are assumed to be married or have a domestic partner.

14. Age of Spouse/Domestic Partner (effective June 30, 2015)

Spouses and domestic partners of male retirees are assumed to be female and three years younger than the retiree. Spouses and domestic partners of female retirees are assumed to be male and two years older than the retiree. Actual spouse demographic data is reflected following benefit commencement.

15. Changes Since the Last Valuation

The LDRM discount rate assumption was added.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Contribution Allocation Procedure (effective for FYE 2023 contributions)

The contribution allocation procedure determines a range of actuarially determined contribution amounts, including a minimum contribution, a maximum contribution, a recommended contribution, and a Reasonable Actuarially Determined Contribution. Because the Plan has been closed to new entrants since April 27, 2003, and the Actuarial Liability is projected to begin declining as benefits are paid out, the Plan's funding policy differs significantly from what would be used for an ongoing pension plan. The objective is to maintain a well-funded pension plan without developing a surplus that could not be used efficiently until all benefits have been paid. Consequently, the funding policy targets maintaining a funded ratio between 80% and 90% rather than the normal target of 100%. Because the Actuarial Liability is expected to decline as benefits continue to be paid out, the dollar amount of the Unfunded Actuarial Liability is expected decline even if the funded percentage does not improve.

The contribution allocation procedure uses various components as described below. All components were adopted as part of the Plan's Funding Policy by the Trustees on July 31, 2023.

1. Actuarial Cost Method

The Entry Age Actuarial Cost Method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund all benefits between each member's date of hire and last assumed date of employment. The Actuarial Liability is the difference between the present value of future benefits and the present value of future normal costs. Or, equivalently, it is the accumulation of normal costs for all periods prior to the valuation date. The normal cost and Actuarial Liability are calculated on an individual basis. The sum of the individual amounts is the normal cost and Actuarial Liability for the Plan. The Actuarial Liability for the Plan represents the target amount of assets the Plan should have as of the valuation date according to the actuarial cost method. The assumed administrative expenses are added to the normal cost each year.

2. Asset Valuation Method

The Actuarial Value of Assets is equal to the Market Value of Assets.

3. Amortization Method

Amortization payments are developed separately for amounts needed to reach an 80% funded ratio and for amounts above the 80% threshold.

If the funded ratio is less than 80%, the difference between 80% of the Actuarial Liability and the Market Value of Assets is amortized using a 10-year layered amortization as a level dollar amount. Once the Plan reaches 80% funded, all amortization layers are eliminated.

For any UAL amount between 80% and 100% funding levels, a payment to maintain the funded status is calculated equal to the greater of interest on this portion of the UAL and the

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

benefit payments expected to be made during the year multiplied by one minus the funded percentage.

As noted above, these amortization methods are not designed to get the Plan to 100% funded until all benefits are paid.

4. Adjustments to Outputs

Funding Level	Less than 80%	80% to 90%	90% or More
Minimum Contribution	<ul style="list-style-type: none"> • Normal cost, plus • Administrative expenses, plus • 10-year layered amortization payment to reach 80%, plus • The payment to maintain the funded status. 	<ul style="list-style-type: none"> • \$0. 	<ul style="list-style-type: none"> • \$0.
Maximum Contribution	<ul style="list-style-type: none"> • The amount necessary to reach 80% funded in one year if all assumptions are met. 	<ul style="list-style-type: none"> • Normal cost, plus • Administrative expenses, plus • The payment to maintain the funded status. 	<ul style="list-style-type: none"> • \$0.
Recommended Contribution	<ul style="list-style-type: none"> • The greater of the Minimum Contribution or TriMet’s budget for pension and OPEB trust contributions, but no greater than the Maximum Contribution. 	<ul style="list-style-type: none"> • Prorated based on funded percentage between Maximum contribution at 80% funded and Minimum Contribution at 90% funded. 	<ul style="list-style-type: none"> • \$0.

The Reasonable Actuarially Determined Contribution is calculated as the greater of the minimum contribution or normal cost plus administrative expenses plus an amortization payment on the UAL based on a 25-year amortization as a level percent of pay.

5. Changes Since the Last Valuation

The funding policy was completely re-written effective for contributions beginning in FYE 2023. The prior one-year amortization method and five-year asset smoothing method were eliminated.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

1. Eligibility

Prior to April 27, 2003: an employee became a participant upon being employed as an eligible employee and was regularly scheduled to work at least 20 hours per week.

On and after April 27, 2003: Employees hired on or after April 27, 2003 are not eligible to participate in this Plan. Active participants on April 27, 2003 with credited service prior to that date made an irrevocable election to either (1) continue earning benefits under this Plan after April 26, 2003 and not earn benefits under the Defined Contribution Plan, or (2) cease earning benefits under this Plan as of April 27, 2003 and earn future benefits under the Defined Contribution Plan.

Inactive participants who are rehired after April 26, 2003 may resume participation in the Plan if certain requirements are met. Employees hired prior to April 27, 2003 who are participants in the Pension Plan for Bargaining Unit Employees of TriMet (“Union Plan”) may become participants in this Plan if they transfer to a management position.

An eligible employee is any management or staff (non-bargaining) common-law employee except those covered by a collective bargaining agreement that does not provide for participation in this Plan, leased employees, employees classified to work less than half time, employees hired on or after April 27, 2003, and employees who transferred their accrued benefit to the Defined Contribution Plan.

2. Credited Service

Credited service includes all periods of service while a participant in the Plan, including military service, authorized vacation, periods of disability (if entitled to benefits under the TriMet Long-Term Disability Policy), periods of service in the Oregon State Legislative Assembly, authorized leave of absence (subject to return to work rules), part time work (i.e., at least 20 but less than 40 hours per week), and work for predecessor employers.

Credited service does not include periods in which TriMet is required to make contributions to Oregon PERS or to any other state mandated retirement program, periods in which the employee is covered by another TriMet retirement plan (including the Defined Contribution Plan and the Union Plan), and service prior to a break in service.

Periods of service are measured in years and whole months. Each twelve month period of credited service equals one year of credited service and partial years are based on the number of complete months worked divided by 12. Part-time employees earn partial credited service based on the percentage of full-time employment.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

3. Vesting Service

All credited service plus any period of service (not already counted as credited service) when an employee is entitled to payment for services rendered to TriMet, excluding service preceding a permanent break in service.

Periods of service are measured in years and whole months. Each twelve-month period of vesting service equals one year of vesting service and partial years are based on the number of complete months worked divided by 12.

4. Contributions

Member

There are no member contributions.

Employer

TriMet makes contributions in accordance with its funding policy which is to be determined in accordance with accepted actuarial principles.

5. Normal Retirement

Eligibility

Age 62

Basic Benefit

The basic benefit is a monthly benefit payable for life equal to 1/12 of 1.75% of final average salary multiplied by credited service. Certain executives who became participants on or before July 1, 2008 receive a different percentage of final average earnings.

Final average salary means 1/3 of the 36 highest consecutive months of base earnings. If the employee is totally disabled, final average salary includes only base earnings paid prior to the onset of disability. Final average salary during a period when an employee is part-time is the employee's salary during the period divided by the percentage of time the part-time employee worked relative to a full-time employee.

Sick Leave Supplement

For participants who retire on or after July 1, 2000, hours of unused sick leave are converted to either a monthly annuity supplement or a lump sum distribution.

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

- The monthly annuity supplement is equal to 50% of hours of sick leave multiplied by the final average hourly rate, divided by 101.9.
- The lump sum distribution is equal to 50% of hours of sick leave multiplied by the final average hourly rate, multiplied by 1.107.

The final average hourly rate is the participant’s final average salary divided by 2,080.

Hours of sick leave are the lesser of the participant’s hours of unused sick leave or the maximum hours of sick leave from the table below.

Effective	Maximum Hours of Sick Leave
July 1, 2000	1,400 hours
March 22, 2005	1,500 hours
December 1, 2005	1,550 hours
December 1, 2006	1,600 hours
December 1, 2007	1,650 hours
December 1, 2008	1,700 hours

6. Early Retirement

Eligibility

Age 55 and 5 years of vesting service.

Benefit

The normal retirement benefit is actuarially reduced based on the UP 1984 mortality table, adjusted to reflect a population that is 50% male and 50% female, and 7.5% interest.

7. Disability Retirement

The Plan does not provide for a disability benefit. However, participants who become entitled to receive disability benefits under the TriMet Long-Term Disability Policy continue to earn credited service toward their normal retirement benefit while disabled.

8. Termination Benefit

Eligibility

5 Years of vesting service.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Benefit

Normal retirement benefit commencing at age 62 or early retirement benefit commencing as early as age 55.

9. Forms of Payment

The following forms of payment are available:

- Single Life Annuity
- 66-2/3% Joint and Survivor Annuity
- Lump Sum

10. Pre-Retirement Death Benefit

The monthly payment payable to the surviving spouse or domestic partner of a vested participant is equal to the survivor portion of the 66 2/3% joint and survivor annuity which the spouse or domestic partner would have received had the participant retired at the time of his or her death (if eligible for retirement), otherwise as if the participant terminated employment on his or her date of death (if not already terminated), survived to the earliest age at which he or she could have elected to retire, retired with a 66 2/3% joint and survivor annuity, and died the following day.

The payment to the surviving spouse commences on the later of the participant's normal retirement date, or the participant's date of death. However, the spouse may commence actuarially reduced benefits following the earliest date the participant could have elected early retirement.

The payment to the domestic partner must commence no later than the December 31 of the calendar year following the participant's death. If the commencement date is earlier than the participant's age 55, the survivor benefit will be actuarial reduced to the commencement date.

11. Post-retirement Cost-of-Living Benefit

Post-retirement benefits for participants who retire after May 31, 1984 are increased each April 1 by 90% of the percentage increase in the U.S. Urban Wage Earners and Clerical Workers Consumer Price Index (CPI-W) (annual average) for the previous calendar year. Annual increases will not be more than 7% per year and benefits will not be decreased if the annual CPI decreases.

12. Changes Since the Last Valuation

None.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Note: The summary of major plan provisions is designed to outline principal plan benefits. If TriMet should find the plan summary not in accordance with the actual provisions, the actuary should immediately be alerted so the proper provisions are valued.

**TRIMET DEFINED BENEFIT RETIREMENT PLAN FOR MANAGEMENT AND STAFF EMPLOYEES
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APPENDIX D – GASB 67/68 CROSSOVER TEST

FYE	Projected Beginning Fiduciary Net Position	Projected Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2024	145,162,348	665,524	100,000	9,872,044	8,434,612	144,290,440	9,872,044	0
2025	144,290,440	841,555	102,750	10,207,875	8,377,492	143,198,861	10,207,875	0
2026	143,198,861	1,028,620	105,577	10,667,898	8,303,844	141,757,851	10,667,898	0
2027	141,757,851	1,207,536	108,480	11,108,596	8,209,559	139,957,870	11,108,596	0
2028	139,957,870	1,378,064	111,464	11,473,752	8,095,718	137,846,437	11,473,752	0
2029	137,846,437	1,551,661	114,529	11,866,666	7,962,458	135,379,360	11,866,666	0
2030	135,379,360	1,713,185	117,678	12,133,161	7,811,237	132,652,943	12,133,161	0
2031	132,652,943	1,869,195	120,914	12,368,703	7,645,205	129,677,726	12,368,703	0
2032	129,677,726	2,006,034	124,239	12,624,171	7,463,087	126,398,436	12,624,171	0
2033	126,398,436	2,125,534	127,656	12,828,464	7,263,721	122,831,572	12,828,464	0
2034	122,831,572	2,243,543	131,166	13,010,636	7,047,709	118,981,021	13,010,636	0
2035	118,981,021	2,355,866	134,774	13,183,348	6,814,784	114,833,549	13,183,348	0
2036	114,833,549	2,430,521	134,757	13,181,758	6,568,190	110,515,744	13,181,758	0
2037	110,515,744	2,485,614	134,403	13,147,138	6,311,785	106,031,602	13,147,138	0
2038	106,031,602	2,519,887	133,736	13,081,919	6,045,697	101,381,531	13,081,919	0
2039	101,381,531	2,534,945	132,170	12,928,767	5,771,712	96,627,250	12,928,767	0
2040	96,627,250	2,532,792	130,018	12,718,272	5,492,678	91,804,429	12,718,272	0
2041	91,804,429	2,520,394	127,824	12,503,693	5,209,350	86,902,657	12,503,693	0
2042	86,902,657	2,483,157	124,693	12,197,453	4,923,289	81,986,956	12,197,453	0
2043	81,986,956	2,430,362	121,062	11,842,204	4,637,396	77,091,448	11,842,204	0
2044	77,091,448	2,366,618	117,247	11,468,980	4,352,927	72,224,768	11,468,980	0
2045	72,224,768	2,288,375	112,793	11,033,286	4,071,626	67,438,689	11,033,286	0
2046	67,438,689	2,200,299	108,038	10,568,209	3,795,747	62,758,487	10,568,209	0
2047	62,758,487	2,104,279	103,032	10,078,580	3,526,719	58,207,873	10,078,580	0
2048	58,207,873	2,002,164	97,831	9,569,823	3,265,857	53,808,240	9,569,823	0
2049	53,808,240	1,895,732	92,494	9,047,731	3,014,325	49,578,073	9,047,731	0
2050	49,578,073	1,786,700	87,082	8,518,408	2,773,100	45,532,383	8,518,408	0
2051	45,532,383	1,676,668	81,660	7,987,934	2,542,949	41,682,406	7,987,934	0
2052	41,682,406	1,567,083	76,283	7,462,045	2,324,416	38,035,578	7,462,045	0
2053	38,035,578	1,459,203	71,007	6,945,924	2,117,831	34,595,681	6,945,924	0

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APPENDIX D – GASB 67/68 CROSSOVER TEST

FYE	Projected Beginning Fiduciary Net Position	Projected Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2054	34,595,681	1,354,069	65,876	6,443,962	1,923,321	31,363,233	6,443,962	0
2055	31,363,233	1,252,508	60,925	5,959,695	1,740,834	28,335,954	5,959,695	0
2056	28,335,954	1,155,097	56,181	5,495,626	1,570,177	25,509,421	5,495,626	0
2057	25,509,421	1,062,218	51,660	5,053,393	1,411,047	22,877,633	5,053,393	0
2058	22,877,633	974,054	47,370	4,633,759	1,263,066	20,433,623	4,633,759	0
2059	20,433,623	890,618	43,312	4,236,725	1,125,816	18,170,021	4,236,725	0
2060	18,170,021	811,822	39,479	3,861,823	998,867	16,079,407	3,861,823	0
2061	16,079,407	737,474	35,863	3,508,108	881,796	14,154,707	3,508,108	0
2062	14,154,707	667,351	32,453	3,174,522	774,204	12,389,287	3,174,522	0
2063	12,389,287	601,272	29,240	2,860,176	675,713	10,776,857	2,860,176	0
2064	10,776,857	539,065	26,215	2,564,259	585,966	9,311,414	2,564,259	0
2065	9,311,414	480,607	23,372	2,286,174	504,616	7,987,091	2,286,174	0
2066	7,987,091	425,813	20,708	2,025,526	431,321	6,797,992	2,025,526	0
2067	6,797,992	374,616	18,218	1,781,990	365,735	5,738,134	1,781,990	0
2068	5,738,134	327,003	15,903	1,555,499	307,500	4,801,235	1,555,499	0
2069	4,801,235	283,012	13,763	1,346,248	256,235	3,980,470	1,346,248	0
2070	3,980,470	242,691	11,802	1,154,443	211,525	3,268,442	1,154,443	0
2071	3,268,442	206,075	10,022	980,268	172,923	2,657,150	980,268	0
2072	2,657,150	173,184	8,422	823,812	139,946	2,138,046	823,812	0
2073	2,138,046	143,974	7,001	684,866	112,085	1,702,239	684,866	0
2074	1,702,239	118,354	5,755	562,999	88,819	1,340,658	562,999	0
2075	1,340,658	96,188	4,677	457,552	69,618	1,044,235	457,552	0
2076	1,044,235	77,263	3,757	367,529	53,962	804,173	367,529	0
2077	804,173	61,332	2,983	291,749	41,350	612,124	291,749	0
2078	612,124	47,640	2,339	228,843	31,301	459,883	228,843	0
2079	459,883	37,415	1,813	177,342	23,403	341,546	177,342	0
2080	341,546	28,646	1,388	135,756	17,285	250,333	135,756	0
2081	250,333	21,659	1,049	102,627	12,595	180,911	102,627	0
2082	180,911	16,164	782	76,578	9,046	128,761	76,578	0
2083	128,761	11,894	576	56,339	6,395	90,135	56,339	0

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APPENDIX D – GASB 67/68 CROSSOVER TEST

FYE	Projected Beginning Fiduciary Net Position	Projected Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2084	90,135	8,617	417	40,810	4,444	61,969	40,810	0
2085	61,969	6,140	297	29,070	3,032	41,775	29,070	0
2086	41,775	4,292	207	20,323	2,026	27,564	20,323	0
2087	27,564	2,944	142	13,925	1,325	17,765	13,925	0
2088	17,765	1,971	95	9,325	846	11,162	9,325	0
2089	11,162	1,285	62	6,077	526	6,834	6,077	0
2090	6,834	815	39	3,856	319	4,074	3,856	0
2091	4,074	502	24	2,378	188	2,363	2,378	0
2092	2,363	302	14	1,422	108	1,337	1,422	0
2093	1,337	175	8	830	61	734	830	0
2094	734	100	5	470	33	392	470	0
2095	392	55	3	257	17	204	257	0
2096	204	30	2	137	9	104	137	0
2097	104	16	1	72	5	51	72	0
2098	51	8	1	37	2	24	37	0
2099	24	5	1	19	1	10	19	0
2100	10	1	0	8	0	2	8	0
2101	2	1	0	3	0	1	2	0
2102	1	0	0	1	0	0	1	0

APPENDIX E – GLOSSARY OF TERMS

1. Actuarial Liability

The Actuarial Liability is the difference between the present value of future benefits and the present value of total future normal costs. This is also referred to as the “accrued liability” or “actuarial accrued liability.” The Actuarial Liability represents the targeted amount of assets a plan should have as of a valuation date according to the actuarial cost method.

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement rate or rates of investment income, and salary increases. Demographic actuarial assumptions (rates of mortality, disability, turnover, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (price inflation, wage inflation, and investment income) are generally based on expectations for the future that may differ from the Plan’s past experience.

3. Actuarial Cost Method

A mathematical budgeting procedure for allocating the dollar amount of the present value of future benefits between future normal cost and Actuarial Liability.

4. Actuarial Gain (Loss)

The difference between actual experience and the anticipated experience based on the actuarial assumptions during the period between two actuarial valuation dates.

5. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at the discount rate and by probabilities of payment.

6. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. For GASB purposes, this date may be up to 24 months prior to the GASB 67/68 measurement date and up to 30 months prior to the employer’s financial reporting date.

7. Actuarially Determined Contribution

The payment to the Plan as determined by the actuary using a contribution allocation procedure. It may or may not be the actual amount contributed to the Plan.

APPENDIX E – GLOSSARY OF TERMS

8. Amortization Method

A method for determining the amount, timing, and pattern of payments on the Unfunded Actuarial Liability.

9. Asset Valuation Method

The method used to develop the Actuarial Value of Assets from the Market Value of Assets typically by smoothing investment returns above or below the assumed rate of return over a period of time.

10. Contribution Allocation Procedure

A procedure typically using an actuarial cost method, an asset valuation method, and an amortization method to develop the Actuarially Determined Contribution.

11. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

12. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

13. Discount Rate

The rate of interest used to discount future benefit payments to determine the actuarial present value. For purposes of determining an Actuarially Determined Contribution, the discount rate is typically based on the long-term expected return on assets.

14. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the service cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

APPENDIX E – GLOSSARY OF TERMS

15. Funded Status or Funding Ratio

The Market or Actuarial Value of Assets divided by the Actuarial Liability. For purposes of this report, the funded status represents the proportion of the actual assets compared to the target established by the actuarial cost method as of the valuation date. These measures are for contribution budgeting purposes and are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

16. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the actuarial valuation date to the measurement date. The measurement date must be the same as the reporting date for the plan.

17. Net Pension Liability

The liability of employers and nonemployer contributing entities to plan members for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position.

18. Normal Cost

The portion of the present value of future benefits allocated to the current year by the actuarial cost method.

19. Plan Fiduciary Net Position

The fair or Market Value of Assets.

20. Present Value of Future Benefits

The actuarial present value of all benefits both earned as of the valuation date and expected to be earned in the future by current plan members based on current plan provisions and actuarial assumptions.

21. Reporting Date

The last day of the plan or employer's fiscal year.

APPENDIX E – GLOSSARY OF TERMS

22. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 67 and 68. The service cost is the normal cost calculated under the Entry Age Actuarial Cost Method.

23. Total Pension Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 67 and 68. The Total Pension Liability is the Actuarial Liability calculated under the Entry Age Actuarial Cost Method.

24. Unfunded Actuarial Liability (UAL)

The Unfunded Actuarial Liability is the difference between Actuarial Liability and either the Market or the Actuarial Value of Assets. This value is sometimes referred to as “unfunded actuarial accrued liability.” It represents the difference between the actual assets and the amount of assets expected by the actuarial cost method as of the valuation date.



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